

Service Manual

LG-E400

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1. INTRODUCTION

1.1 Purpose

This manual provides the information necessary to repair, calibration, description and download the features of this model.

1.2 Regulatory Information

A. Security

Toll fraud, the unauthorized use of telecommunications system by an unauthorized part (for example, persons other than your company's employees, agents, subcontractors, or person working on your company's behalf) can result in substantial additional charges for your telecommunications services. System users are responsible for the security of own system. There are may be risks of toll fraud associated with your telecommunications system. System users are responsible for programming and configuring the equipment to prevent unauthorized use. The manufacturer does not warrant that this product is immune from the above case but will prevent unauthorized use of common carrier telecommunication service of facilities accessed through or connected to it. The manufacturer will not be responsible for any charges that result from such unauthorized use.

B. Incidence of Harm

If a telephone company determines that the equipment provided to customer is faulty and possibly causing harm or interruption in service to the telephone network, it should disconnect telephone service until repair can be done. A telephone company may temporarily disconnect service as long as repair is not done.

C. Changes in Service

A local telephone company may make changes in its communications facilities or procedure. If these changes could reasonably be expected to affect the use of the phones or compatibility with the net work, the telephone company is required to give advanced written notice to the user, allowing the user to take appropriate steps to maintain telephone service.

D. Maintenance Limitations

Maintenance limitations on the phones must be performed only by the manufacturer or its authorized agent. The user may not make any changes and/or repairs expect as specifically noted in this manual. Therefore, note that unauthorized alternations or repair may affect the regulatory status of the system and may void any remaining warranty.

E. Notice of Radiated Emissions

This model complies with rules regarding radiation and radio frequency emission as defined by local regulatory agencies. In accordance with these agencies, you may be required to provide information such as the following to the end user.

F. Pictures

The pictures in this manual are for illustrative purposes only; your actual hardware may look slightly different.

G. Interference and Attenuation

A phone may interfere with sensitive laboratory equipment, medical equipment, etc. Interference from unsuppressed engines or electric motors may cause problems.

H. Electrostatic Sensitive Devices

ATTENTION

Boards, which contain Electrostatic Sensitive Device (ESD), are indicated by the  sign.

Following information is ESD handling:

- Service personnel should ground themselves by using a wrist strap when exchange system boards.
- When repairs are made to a system board, they should spread the floor with anti-static mat which is also grounded.
- Use a suitable, grounded soldering iron.
- Keep sensitive parts in these protective packages until these are used.
- When returning system boards or parts like EEPROM to the factory, use the protective package as described.

2. PERFORMANCE

2.1 Product Name

E400 : WCDMA900/2100+EGSM/GSM850/DCS/PCS

(HSDPA 3.6Mbps GPRS Class 12 / EDGE Class 12)

2.2 Supporting Standard

Item	Feature	Comment
Supporting Standard	WCDMA(FDD1,8)/EGSM/GSM850/DCS1800/PCS1900 with seamless handover Phase 2+(include AMR) SIM Toolkit: Class 1, 2, 3, C-E	
Frequency Range	WCDMA(FDD1) TX : 1920 – 1980 MHz WCDMA(FDD1) RX : 2110 – 2170 MHz WCDMA(FDD8) TX : 880~915 MHz WCDMA(FDD8) RX : 925~960 MHz EGSM TX: 880 – 915 MHz EGSM RX: 925 – 960 MHz GSM850 TX: 824 – 849 MHz GSM850 RX: 869 – 894 MHz DCS1800 TX : 1710 – 1785 MHz DCS1800 RX: 1805 – 1880 MHz PCS1900 TX: 1850 – 1910 MHz PCS1900 RX: 1930 – 1990 MHz	
Application Standard	WAP 2.0	

2.3 Main Parts : GSM Solution

Item	Part Name	Comment
Digital Baseband	MSM7225A: Qualcomm	
Analog Baseband	PM8029 : Qualcomm	
RF Chip	RTR6285A : Qualcomm	

2.4 HW Features

Item	Feature	Comment
Form Factor	DOP type	
Battery	1) Capacity Standard : Li-Ion , 1500mAh	
	2) Packing Type : Soft Pack	
Size	Standard : 102.6 x 61.6 x 11.85 mm	
Weight	119g	With Battery
Volume	74.89cc	
PCB	Staggered 8 Layers , 0.8t	
Stand by time	2G Up to 600 hrs 3G Up to 600 hrs	@ Paging Period 5 (2G) @ DRX 7 (3G)
Charging time	3 hrs	@ Power Off / 1500mAh
Talk time	2G Up to 750mins 3G Up to 600mins	@ Power Level 13 (2G) @ Tx = 0dBm (3G)
RX sensitivity	WCDMA(FDD1) : -106.7 dBm WCDMA(FDD8) : -104.7 dBm EGSM : -105 dBm GSM850 : -105 dBm DCS 1800 : -105 dBm PCS 1900 : -105 dBm	

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TX output power	WCDMA/ GSM/ GPRS	WCDMA : 24dBm/3.84MHz,+1/-3dBm EGSM : 33dBm GSM850 : 33 dBm DCS 1800 : 30 dBm PCS 1900 : 30 dBm	Class3(WCDMA) Class4 (EGSM) Class4 (GSM850) Class1 (PCS) Class1 (DCS)
	EDGE	GSM 900 : 27 dBm DCS 1800 : 26 dBm PCS 1900 : 26 dBm	E2 (GSM900) E2 (PCS) E2 (DCS)
GPRS compatibility		GPRS Class 12	
EDGE compatibility		EDGE Class 12	
SIM card type		Plug-In SIM 3V /1.8V	
Display		Main LCD TFT Main LCD(3.2', 240 x 320)	
Built-in Camera		3M FF CMOS Camera	
Status Indicator		No	
Keypad		Function key : 1 Side Key : 2 Power key : 1	Function Key: Home, Back, Menu, Side Key : Volume up/down
ANT		Main : Internal Fixed Type	LDS type
System connector		5 Pin	
Ear Phone Jack		3.5Phi, 4 Pole, Stereo	
PC synchronization		Yes	
Memory		eMMC : 2GByte DRAM :3Gbit	
Speech coding		FR, EFR, HR,AMR	
Data & Fax		Built in Data & Fax support	

2. PERFORMANCE

Vibrator	Built in Vibrator	
Blue Tooth	V3.0	
MIDI(for Buzzer Function)	SW Decoded 72Poly	
Music Player	MP3/ WMA/AAC/HE-AAC/EAAC+	
Video Player	MPEG4, H.263, H.264	
Camcorder	MPEG4, H.263, H.264	
Voice Recording	Yes	
Speaker Phone mode Support	Yes	
Travel Adapter	Yes	
CDROM	No	
Stereo Headset	Yes	Not inbox
Data Cable	Yes	
T-Flash (External Memory)	Yes	Not inbox

2.5 SW Features

Item	Feature	Comment
RSSI	0 ~ 4 Levels	
Battery Charging	0 ~ 20 Levels	
Key Volume	0 ~ 7 Level	
Audio Volume	0 ~ 7 Level	
Time / Date Display	Yes	
Multi-Language	Yes	English/French/German/Spanish/Italian/Danish/Dutch/Korean
Quick Access Mode	Dialing/ Contact / Menu / Message	
PC Sync	Yes	
Speed Dial	Yes	
Profile	Yes	not same with feature phone setting
CLIP / CLIR	Yes	
Phone Book	Name / Number / Email / Website/Postal addresses/Organizations/Groups/ Birthday / Ringtone	There is no limitation on the number of items. It depends on available memory amount.
Last Dial Number	Yes	Last Dial Numbers, Last Received Numbers and Last Missed Numbers can store up to a total of 500.
Last Received Number	Yes	Last Dial Numbers, Last Received Numbers and Last Missed Numbers can store up to a total of 500.
Last Missed Number	Yes	Last Dial Numbers, Last Received Numbers and Last Missed Numbers can store up to a total of 500.

2. PERFORMANCE

Search by Number / Name	Name	
Group	Yes	There is no limitation on the number of items. It depends on available memory amount.
Fixed Dial Number	Yes	
Service Dial Number	No	
Own Number	Yes	Read only (add/edit/delete are not supported)
Voice Memo	Yes	
Call Reminder	No	
Network Selection	Automatic	
Mute	Yes	
Call Divert	Yes	
Call Barring	Yes	
Call Charge (AoC)	Yes	
Call Duration	Yes	
SMS (EMS)	There is no limitation on the number of items. It depends on available memory amount.	EMS does not support.
SMS Over GPRS	No	
EMS Melody / Picture	No	
Send / Receive / Save	No	
MMS MPEG4 Send / Receive / Save	Yes	
Long Message	MAX 2000 characters	

2. PERFORMANCE

Cell Broadcast	Yes	
Download	Over the Web	
Game	No	
Calendar	Yes	
Memo	No	
World Clock	No	
Unit Convert	No	
Stop Watch	No	
Wall Paper	Yes	
WAP Browser	No	Support only web browser based on webkit. WAP stack and wml are not supported.
Download Melody / Wallpaper	Yes	Over web browser
SIM Lock	Yes	Operator Dependent
SIM Toolkit	Class 1, 2, 3, C	
MMS	Yes	Google MMS Client
EONS	No	
CPHS	Yes	V4.2
ENS	No	
Camera	Yes	3M FF / Digital Zoom : x4
JAVA	No	
Voice Dial	No	
IrDa	No	
Bluetooth	Yes	Ver. 3.0
FM radio	Yes	
GPRS	Yes	Class 12
EDGE	Yes	Class 12

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Hold / Retrieve	Yes	
Conference Call	Yes	Max. 6
DTMF	Yes	
Memo pad	No	
TTY	No	
AMR	Yes	
SyncML	Yes	
IM	No	
Email	Yes	

2.6 HW SPEC.

1) GSM transceiver specification

Item	Specification
Phase Error	Rms : 5° Peak : 20 °
Frequency Error	GSM : 0.1 ppm DCS/PCS : 0.1 ppm
EMC(Radiated Spurious Emission Disturbance)	GSM/DCS : < -28dBm
Transmitter Output power and Burst Timing	GSM : 5dBm – 33dBm ± 3dB DCS/PCS : 0dBm – 30dBm ± 3dB
Burst Timing	<3.69us
Spectrum due to modulation out to less than 1800kHz offset	200kHz : -36dBm 600kHz : -51dBm/-56dBm
Spectrum due to modulation out to larger than 1800kHz offset to the edge of the transmit band	GSM : 1800-3000kHz : < -63dBc(-46dBm) 3000kHz-6000kHz : < -65dBc(-46dBm) 6000kHz < : < -71dBc(-46dBm) DCS : 1800-3000kHz : < -65dBc(-51dBm) 6000kHz < : < -73dBc(-51dBm)
Spectrum due to switching transient	400kHz : -19dBm/-22dBm(5/0), -23dBm 600kHz : -21dBm/-24dBm(5/0), -26dBm
Reference Sensitivity – TCH/FS	Class II(RBER) : -105dBm(2.439%)
Usable receiver input level range	0.012(-15 - -40dBm)
Intermodulation rejection – Speech channels	± 800kHz, ± 1600kHz : -98dBm/-96dBm (2.439%)
AM Suppression GSM : -31dBm - DCS : -29dBm	-98dBm/-96dBm (2.439%)
Timing Advance	± 0.5T

2) WCDMA transmitter specification

Item	Specification
Transmit Frequency	Band1 : 1920 MHz ~ 1980 MHz Band8 : 880MHz ~ 915MHz
Maximum Output Power	+24 dBm / 3.84 MHz, +1 / -3 dB
Frequency Error	within ± 0.1 PPM
Open Loop Power Control	Normal Conditions : within ± 9 dB, Extreme Conditions : within ± 12 dB
Minimum Transmit Power	< -50 dBm / 3.84 MHz
Occupied Bandwidth	< 5 MHz at 3.84 Mcps (99% of power)
Adjacent Channel Leakage Power Ratio (ACLR)	> 33 dB @ ± 5 MHz, > 43 dB @ ± 10 MHz
Spurious Emissions $ f-f_c > 12.5$ MHz	< -36 dBm / 1 kHz RW @ $9 \text{ kHz} \leq f < 150 \text{ kHz}$ < -36 dBm / 10 kHz RW @ $150 \text{ kHz} \leq f < 30 \text{ MHz}$ < -36 dBm / 100 kHz RW @ $30 \text{ MHz} \leq f < 1 \text{ GHz}$ < -30 dBm / 1 MHz RW @ $1 \text{ GHz} \leq f < 12.75 \text{ GHz}$ < -60 dBm / 3.84 MHz RW @ $869 \text{ MHz} \leq f \leq 894 \text{ MHz}$ < -60 dBm / 3.84 MHz RW @ $1930 \text{ MHz} \leq f \leq 1900 \text{ MHz}$ < -60 dBm / 3.84 MHz RW @ $2110 \text{ MHz} \leq f \leq 2155 \text{ MHz}$ < -67 dBm / 100 kHz RW @ $925 \text{ MHz} \leq f \leq 935 \text{ MHz}$ < -79 dBm / 100 kHz RW @ $935 \text{ MHz} < f \leq 960 \text{ GHz}$ < -71 dBm / 100 kHz RW @ $1805 \text{ MHz} \leq f \leq 1880 \text{ MHz}$ < -41 dBm / 300 kHz RW @ $1884.5 \text{ MHz} < f < 1919.6 \text{ MHz}$
Transmit Intermodulation	< -31 dBc @ 5 MHz & < -41 dBc @ 10 MHz when Interference CW Signal Level = -40 dBc
Error Vector Magnitude	< 17.5 %, when $P_{out} \geq -20$ dBm
Peak Code Domain Error	< -15 dB at $P_{out} \geq -20$ dBm

3) WCDMA receiver specification

Item	Specification																			
Receive Frequency	Band1 : 2110 ~ 2170 MHz Band8 : 925~960MHz																			
Reference Sensitivity Level	Band1 : BER < 0.001 when Îor = -106.7 dBm / 3.84 MHz Band8 : BER < 0.001 when Îor = -103.7 dBm / 3.84 MHz																			
Maximum Input Level	BER < 0.001 when Îor = -25 dBm / 3.84 MHz																			
Adjacent Channel Selectivity (ACS)	ACS > 33 dB where BER < 0.001 when Îor = -92.7dBm / 3.84 MHz & loac = -52 dBm / 3.84 MHz @ ±5 MHz(Band1) Îor = -89.7dBm / 3.84 MHz & loac = -52 dBm / 3.84 MHz @ ±5 MHz(Band8)																			
Blocking Characteristic	BER < 0.001 when Îor = -103.7 dBm / 3.84 MHz & lblocking = -56 dBm / 3.84 MHz @ Fuw(offset) = ±10 MHz or lblocking = -44 dBm / 3.84 MHz @ Fuw(offset) = ±15 MHz																			
Spurious Response	BER < 0.001 when Îor = -103.7 dBm / 3.84 MHz & lblocking = -44 dBm																			
Intermodulation	BER < 0.001 when Îor=-103.7 dBm / 3.84 MHz, Îor = -100.7 dBm/ 3.84 MHz(Band8) & louw1 = -46 dBm @ Fuw1(offset) = ±10 MHz & louw2 = -46 dBm / 3.84 MHz @ Fuw2(offset) = ±20 MHz																			
Spurious Emissions	< -57 dBm / 100 kHz BW @ 9 kHz ≤ f < 1 GHz < -47 dBm / 1 MHz BW @ 1 GHz ≤ f ≤ 12.75 GHz																			
Inner Loop Power Control In Uplink	Adjust output(TPC command) <table><tr><td>cmd</td><td>1dB</td><td>2dB</td><td>3dB</td></tr><tr><td>+1</td><td>+0.5/1.5</td><td>+1/3</td><td>+1.5/4</td></tr><tr><td>0</td><td>-0.5/+0.5</td><td>-0.5/+0.5</td><td>-0.5/+0.5</td></tr><tr><td>-1</td><td>-0.5/-1.5</td><td>-1/-3</td><td>-1.5/-4</td></tr></table> group(10equal command group) <table><tr><td>+1</td><td>+8/+12</td><td>+16/+24</td></tr></table>	cmd	1dB	2dB	3dB	+1	+0.5/1.5	+1/3	+1.5/4	0	-0.5/+0.5	-0.5/+0.5	-0.5/+0.5	-1	-0.5/-1.5	-1/-3	-1.5/-4	+1	+8/+12	+16/+24
cmd	1dB	2dB	3dB																	
+1	+0.5/1.5	+1/3	+1.5/4																	
0	-0.5/+0.5	-0.5/+0.5	-0.5/+0.5																	
-1	-0.5/-1.5	-1/-3	-1.5/-4																	
+1	+8/+12	+16/+24																		

4) HSDPA transmitter specification

Item	Specification				
Transmit Frequency	Band1 : 1920 MHz ~ 1980 MHz Band8 : 880MHz ~ 915MHz				
Maximum Output Power	Sub-Test 1=1/15, 2=12/15 21~25dBm / 3.84 MHz 3=13/15 4=15/8 20~25dBm / 3.84 MHz 5=15/7 6=15/0 19~25dBm / 3.84 MHz				
HS-DPCCH	Sub-test in table C.10.1.4	Power step	Power step slot boundary	Power step size, P [dB]	Transmitter power step tolerance [dB]
	5	1	Start of Ack/Nack	6	+/- 2.3
		2	Start of CQI	1	+/- 0.6
		3	Middle of CQI	0	+/- 0.6
		4	End of CQI	5	+/- 2.3
Spectrum Emission Mask	Sub-Test : 1=1/15, 2=12/15, 3=13/15, 4=15/8, 5=15/7, 6=15/0				
	Frequency offset from carrier f		Minimum requirement		Measurement Bandwidth
	2.5 ~ 3.5 MHz		-35-15×(f-2.5)dBc		30 kHz
	3.5 ~ 7.5 MHz		-35-1×(f-3.5)dBc		1 MHz
	7.5 ~ 8.5 MHz		-35-10×(f-7.5)dBc		1 MHz
	8.5 ~ 12.5 MHz		-49dBc		1 MHz
Adjacent Channel Leakage Power Ratio (ACLR)	Sub-Test : 1=1/15, 2=12/15, 3=13/15, 4=15/8, 5=15/7, 6=15/0 > 33 dB @ ±5 MHz > 43 dB @ ±10 MHz				
Error Vector Magnitude	< 17.5 %, when Pout ≥ -20 dBm				

5) HSDPA receiver specification

Item	Specification
Receive Frequency	Band1 : 2110 MHz ~ 2170 MHz Band8 : 925 MHz ~ 960 MHz
Maximum Input Level (BLER or R), 16QAM Only	Sub-Test : 1=1/15, 2=12/15, 3=13/15, 4=15/8, 5=15/7, 6=15/0 BLER < 10% or R >= 700kbps

6) WLAN 802.11b transceiver specification

Item	Specification
Transmit Frequency	2400 MHz ~ 2483.5 MHz (CH1~CH13)
Tx Power Level	≤ 20dBm under (Europe), ≤ 30dBm under (USA)
Frequency Tolerance	within ±25 PPM
Chip clock Frequency Tolerance	within ±25 PPM
Spectrum Mask	≤ -30 @ $f_c - 22\text{MHz} < f < f_c - 11\text{MHz}$ and $f_c + 11\text{MHz} < f < f_c + 22\text{MHz}$ ≤ -50 @ $f < f_c - 22\text{MHz}$ and $f > f_c + 22\text{MHz}$
Power ramp on/off time	≤ 2us
Carrier Suppression	≤ -15dB
Modulation Accuracy (Peak EVM)	≤ 35%
Spurious Emissions	< -36 dBm @ 30MHz ~ 1GHz < -30 dBm above @ 1GHz ~ 12.75GHz < -47 dBm @ 1.8GHz ~ 1.9GHz < -47 dBm @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	≤ -76dBm(1Mbps,2Mbps,5.5Mbps,11Mbps) @ FER ≤ 8%
Rx Max input Sensitivity	≥ -10dBm(1Mbps,2Mbps,5.5Mbps,11Mbps) @ FER ≤ 8%
Rx Adjacent Channel Rejection	≥ 35dB @FER ≤ 8%, interference input signal -70dBm@ $f_c \pm 25\text{MHz}$ (11Mbps)

7) WLAN 802.11g transceiver specification

Item	Specification
Transmit Frequency	2400 MHz ~ 2483.5 MHz (CH1~CH13)
Tx Power Level	$\leq 20\text{dBm}$ under (Europe), $\leq 30\text{dBm}$ under (USA)
Frequency Tolerance	within ± 25 PPM
Chip clock Frequency Tolerance	within ± 25 PPM
Spectrum Mask	≤ -20 @ $\pm 11\text{MHz}$ offset (9Mhz ~ 11MHz) ≤ -28 @ $\pm 20\text{MHz}$ offset (11MHz ~ 20Mhz) ≤ -40 @ $\pm 30\text{MHz}$ offset (20MHz ~ 30Mhz)
Transmitter constellation error (rms EVM)	$\leq -5\text{dB}$
Spurious Emissions	$< -36\text{ dBm}$ @ 30MHz ~ 1GHz $< -30\text{ dBm}$ above @ 1GHz ~ 12.75GHz $< -47\text{ dBm}$ @ 1.8GHz ~ 1.9GHz $< -47\text{ dBm}$ @ 5.15GHz ~ 5.3GHz
Rx Min input Sensitivity	PER $\leq 10\%$ $-82\text{dBm}@6\text{Mbps}$, $-81\text{dBm}@9\text{Mbps}$, $-79\text{dBm}@12\text{Mbps}$ $-77\text{dBm}@18\text{Mbps}$, $-74\text{dBm}@24\text{Mbps}$, $-70\text{dBm}@36\text{Mbps}$ $-66\text{dBm}@48\text{Mbps}$, $-65\text{dBm}@54\text{Mbps}$
Rx Max input Sensitivity	$\geq -20\text{dBm}(6,9,12,18,24,36,48,54\text{Mbps})$ @ PER $\leq 10\%$
Rx Adjacent Channel Rejection	PER $\leq 10\%$, ACR $\geq 16\text{dB}@6\text{Mbps}$, ACR $\geq 15\text{dB}@9\text{Mbps}$, ACR $\geq 13\text{dB}@12\text{Mbps}$, ACR $\geq 11\text{dB}@18\text{Mbps}$, ACR $\geq 8\text{dB}@24\text{Mbps}$, ACR $\geq 4\text{dB}@36\text{Mbps}$ ACR $\geq 0\text{dB}@48\text{Mbps}$, ACR $\geq -1\text{dB}@54\text{Mbps}$ ACR shall be measured by setting the desired signal's strength 3 dB above the rate-dependent sensitivity specified in min input sensitivity

8) GPS receiver specification

Item	Specification
Receive Frequency	1574.42 MHz ~ 1576.42 MHz
Minimum Sensitivity	1 satellite $\geq -142\text{dBm}$, 7 satellites $\geq -147\text{dBm}$ at coarse time aiding

3. Android_Final CIC_FAQ

3.1 Multimedia

Question	Answer
Is it possible to save picture to internal memory after taking a picture?	This is Android OS limitation. The picture only can be saved in external memory (SD Card).
Is there any limitation of file size when setting ring tone by MP3?	No limitation. [How to setup the ring tone by MP3] From home screen -> Luncer -> Music -> Select the song -> Menu -> Click "Use as ringtone" [How to change the other ringtone to be enclosed] Menu -> Setting -> Sound -> Phone ringtone -> Find and select the song which you want to set as ringtone.
Is it possible to update Video codec on the phone?	No, it's impossible.
Is it possible to update Music codec on the phone?	No, it's impossible.
How to setup the Alarm ring tone by MP3 file?	Yes, It's possible. [How to do] Click Luncer -> Click Clock application -> Click "Clock Icon" -> Select the time which you want to setup the alarm or "Add Alaram" -> Ringtone -> Selete ring tone

3.2 Setting

Question	Answer
Is it possible to change the language?	It's possible. [How to do] From Homescreen -> menu -> settings -> Language & Keyboard -> Select language -> Select the language what you want.
How to do after missing the lock pattern? Unfortunately, customer didn't create the Google account from the phone.	Customer should have to visit the SVC center. # Attention 1) In case that customer do factory reset , All installed customer application and data will be erased. hence, customer should have to do backup them in advice. 2) In case that you miss the PIN or Pass code, you also should have to visit the SVC center.
Is there any notification when the internal memory is full?	It will be notified on the status bar when it is full. If you download the "Android System Info" application from the Market. You can check system information visually. (Internal Memory Size ==> 170MB) [How to check the internal memory size] From Home screen -> Settings -> Check "Internal phone storage"
How to do when missing lock pattern? # Customer have already logged into Google server on the phone.	After customer fail to try it 5 times, customer can try again in 30 seconds or customer can access the Google E-Mail server again, and customer can reset the lock pattern.

Question	Answer
<p>Now the Screen is off after 15 seconds by default if phone is in the status of From Homescreen. Customer want to set up the screen timeout longer than 15 seconds.</p> <p>How to set up the screen timeout?</p>	<p>[How to do]</p> <p>From Homescreen -> memu -> settings -> display -> screen timeout -> select timeout</p>
<p>Is it possible to turn off the 3G data service? Customer want to use only wifi service.</p>	<p>Yes, It's possible. If customer uncheck the "Mobile network", It won't be operate for data connection. customer only can use calling & SMS.</p> <p>[How to do]</p> <p>From Homescreen -> Menu -> Setting -> Wiress & networks -> Mobile network -> Uncheck "Data Enable"</p>
<p>How to Factorey reset?</p> <p># Factory reset means the phone will be recoved to factory shipment status. Installed application, PIM data by user will be erased after doing factory reset.</p>	<p>[How to do]</p> <p>From Homescreen->Menu->Setting->Privacy ->Factory Data Reser->Reset Phone->Erase every thing</p>
<p>How to recognize the mass storage(SD card) when connecting Phone with Laptop by USB data cable?</p>	<p>Menu -> Settings -> SD card & phone storage -> check "Mass storage only"</p>
<p>How to do calibration for touch window?</p>	<p>It's not supported.</p> <p># Pls, refer to the below tip.</p> <p>Touch Calibration is only applied to the model which has resistive touch LCD.</p> <p>-> Thunder model (Vs660,p-500 etc) with capacitive is no need for Touch Calibration. therefore, Touch Calibration is not supportive.</p>

Question	Answer
Exchange manager can do remote factory reset in case that he lost the phone.	<p>It will be possible to do factory reset If you have a Exchange account and you tried to log in MS exchange via phone.</p> <p># Currently, TMUS & ORG SW version are not supportive.</p> <p>[How to do]</p> <ol style="list-style-type: none"> 1. First, You should have a authority of Exchange Server administrator. 2. and then, you can make a factory reset remotely via OWA(Outlook Web Access) <ul style="list-style-type: none"> - "Mobile Device" -> Select the device from the device list -> Select "Device Remove"
How to calibrate for Compass?	<p>The customer should have to do calibration for digital compass.</p> <p>[How to do]</p> <p>After executng the compass application, move the phone as the shape of "∞" for 2~3 seconds.</p>
Is it possible to remove application Icon in home menu?	<p>Yes, It's possible.</p> <p>[How to do]</p> <p>Long press the icon which customer want to remove and then drag and drop it to trash can.</p>
How to change the Home screen?	<p>Officially, it only provides LG Home. If you want to add the home screen, pls, download the Home launcher program from the Android market.</p>
Is it possible to use tethering with Android 2.2?	<p>Yes, it's supported.</p> <p>From Homescreen -> Settings -> Wireless & network settings -> Tethering & Portable hotspot -> check "USB tethering" (Phone should be connected with 3G network)</p> <p># In case of Android 2.1, you need to download the DUN application from the Market. (Ex. PDA Net)</p>

Question	Answer
How to Factory reset? # Factory reset means the phone will be recovered to factory shipment status. Installed application, PIM data by user will be erased after doing factory reset.	[How to do] From Homescreen->Menu->Setting->Privacy ->Factory Data Reser->Reset Phone->Erase every thing
How to recognize the mass storage(SD card) when connecting Phone with Laptop by USB data cable?	Menu -> Settings -> SD card & phone storage -> check "Mass storage only"
How to do calibration for touch window?	It's not supported. # Pls, refer to the below tip. Touch Calibration is only applied to the model which has resistive touch LCD. -> Thunder model (Vs660,p-500 etc) with capacitive is no need for Touch Calibration. therefore, Touch Calibration is not supportive.
Exchange manager can do remote factory reset in case that he lost the phone.	It will be possible to do factory reset If you have a Exchange account and you tried to log in MS exchange via phone. # Currently, TMUS & ORG SW version are not supportive. [How to do] 1. First, You should have a authority of Exchange Server administrator. 2. and then, you can make a factory reset remotely via OWA(Outlook Web Access) - "Mobile Device" -> Select the device from the device list -> Select "Device Remove"
How to calibrate for Compass?	The customer should have to do calibration for digital compass. [How to do] After executng the compass application, move the phone as the shape of "∞" for 2~3 seconds.

Question	Answer
Is it possible to remove application Icon in home menu?	Yes, It's possible. [How to do] Long press the icon which customer want to remove and then drag and drop it to trash can.
How to change the Home screen?	Officially, it only provides LG Home. If you want to add the home screen, pls, download the Home launcher program from the Android market.
Is it possible to use tethering with Android 2.2?	Yes, it's supported. From Homescreen -> Settings -> Wireless & network settings -> Tethering & Portable hotspot -> check "USB tethering" (Phone should be connected with 3G network) # In case of Android 2.1, you need to download the DUN application from the Market. (Ex. PDA Net)
What is the APN Setting? (From Homescreen -> Menu -> Settings -> Wireless controls -> Mobile networks -> Access Point Names(APN) -> New APN	1. When the customer use this option? 1) In case of using other operator's SIM card 2) In case of using prepaid SIM card 3) In case of using phone which is for open market. 2. Where the customer get the setting information? Basically, if you set the Name & APN, the rest of option will be set automatically. Most of information is depend on carrier. hence, the customer should have to inquire them to carrier.(APN address / Customer name / Password)
Is it possible to change Log-in account or remove?	How to delete initially created Google account. -> Only Factory reset is possilbe (Google scenario)

Question	Answer
How to setup the Alarm ring tone by MP3 file?	<p>Yes, It's possible.</p> <p>[How to do]</p> <p>Click Luncher -> Click Clock application -> Click "Clock Icon" -> Select the time which you want to setup the alarm or "Add Alaram" -> Ringtone -> Selete ring tone</p>
How to backup Contacts?	<p>There are several ways as below.</p> <p>1. Copy it to SIM Card.</p> <p>[How to do]</p> <p>From contacts->Menu->More->Import/Export->Export to SIM.</p> <p>2. Copy it to SD Card.</p> <p>[How to do]</p> <p>From contacts->Menu->More->Import/Export->Export to SD Card.</p> <p>3. Synchronize it with Google server.</p> <p>[How to do]</p> <p>From Homescreen ->Menu->Setting->Data synchronization->Click Auto-sync.</p>
How to obtain the "Android PC suit program". # PC Sync means synchronizing PIM(personal information management)data such as contacts, calendar, E-mail and MP3, Video, Picture.	<p>Download "LG Mobile Support Tool" from the below website.</p> <p>[How to download 'LG Mobile Support Tool']</p> <p>WWW.lg.com -> Select Your Region -> Select Your country</p> <p>-> Support -> Mobile phone support -> Click "Download"</p> <p>[How to do]</p> <p>Execute "LG Mobile Support Tool" -> "Customer Support -> "Application, Manual & USB Driver Download" -> Input IMEI & Model & Serial No -> Download PC Sync program.</p>
How to obtain the Wifi MAC address?	<p>[How to check MAC address]</p> <p>From Homescreen->Menu->Setting->About phone ->Status->Wifi MAC address.</p>

3.3 Home

Question	Answer
Is it possible to remove application Icon in home menu?	Yes, It's possible. [How to do] Long press the icon which customer want to remove and then drag and drop it to trash can.
How to change the Home screen?	Officially, it only provides LG Home. If you want to add the home screen, pls, download the Home launcher program from the Android market.

3.4 Internet

Question	Answer
Is it possible to use tethering with Android 2.2?	<p>Yes, it's supported.</p> <p>From Homescreen -> Settings -> Wireless & network settings -> Tethering & Portable hotspot -> check "USB tethering" (Phone should be connected with 3G network)</p> <p># In case of Android 2.1, you need to download the DUN application from the Market. (Ex. PDA Net)</p>
<p>What is the APN Setting?</p> <p>(From Homescreen -> Menu -> Settings -> Wireless controls -> Mobile networks -> Access Point Names(APN) -> New APN</p>	<p>1. When the customer use this option?</p> <ol style="list-style-type: none"> 1) In case of using other operator's SIM card. 2) In case of using prepaid SIM card. 3) In case of using phone which is for open market. <p>2. Where the customer get the setting information?</p> <p>Basically, if you set the Name & APN, the rest of option will be set automatically.</p> <p>Most of information is depend on carrier. hence, the customer should have to inquire them to carrier.(APN address / Customer name / Password)</p>
In the status that the customer turn on both Wifi and 3G data service, which one have higher priority?	Wifi service have higer priority than 3G data service when both of them are available at the same time.

3.5 Message,E-mail

Question	Answer																								
Multi G-mail account Is supported?	Yes, It is. [How to do] Execute G-Mail -> Menu -> Accounts --> Add account -> Next -> Sign in or Create																								
Customer should have to log-into G-mail whenever they want to access G-mail?	Once customer log into G-mail, No need to do it again before factory reset.																								
How to forward the received message to other people?	[How to check] Execute “Message” application -> go to “In box” -> Select and long click the message which you want to forward -> select “Forward”																								
What will happen when deleting the E-mail according to the protocol?	<table><tr><th rowspan="2">Protocol</th><th colspan="2">Detection Behavior</th><th rowspan="2">Type</th></tr><tr><th>In device</th><th>In server</th></tr><tr><td rowspan="2">POP3</td><td>Move ir to trash box</td><td>No change</td><td rowspan="2">Asynchronous</td></tr><tr><td>Delete it from trash box</td><td>No change</td></tr><tr><td rowspan="2">IMAP</td><td>Move ir to trash box</td><td>Move ir to trash box</td><td rowspan="2">Synchronous</td></tr><tr><td>Delete it from trash box</td><td>Delete it from trash box</td></tr><tr><td rowspan="2">Exchange</td><td>Move ir to trash box</td><td>Move ir to trash box</td><td rowspan="2">Synchronous</td></tr><tr><td>Delete it from trash box</td><td>Delete it from trash box</td></tr></table>	Protocol	Detection Behavior		Type	In device	In server	POP3	Move ir to trash box	No change	Asynchronous	Delete it from trash box	No change	IMAP	Move ir to trash box	Move ir to trash box	Synchronous	Delete it from trash box	Delete it from trash box	Exchange	Move ir to trash box	Move ir to trash box	Synchronous	Delete it from trash box	Delete it from trash box
Protocol	Detection Behavior		Type																						
	In device	In server																							
POP3	Move ir to trash box	No change	Asynchronous																						
	Delete it from trash box	No change																							
IMAP	Move ir to trash box	Move ir to trash box	Synchronous																						
	Delete it from trash box	Delete it from trash box																							
Exchange	Move ir to trash box	Move ir to trash box	Synchronous																						
	Delete it from trash box	Delete it from trash box																							
Is it possible to create the MS exchange account via E-Mail?	It will be different according to the operator. Pls, check as below whether it’s supported or not. [How to do] From Homescreen->Launcher->E-Mail->MS Exchange * MS Exchange account is not free. It’s will be charged by Microsoft if you want to use.																								
Is it possible to change Log-in account or remove?	How to delete initially created Google account. -> Only Factory reset is possilbe (Google scenario).																								
How many can I create the MS Exchange account on the phone?	In case of E-mail account, you can create it up to 7 regardless POP3/IMAP4/MS Exchange option.																								
MS Exchange Setting Guide.	Go to 48~49 page (How to set up MS Exchange #1/ How to set up MS Exchange #2)																								

Question	Answer
Maximum file size of attachments when you compose the G-mail and E-mail on the phone.	<p>1) In case of Gmail</p> <ul style="list-style-type: none"> - It's only possible to upload the image file. - Max file size is up to 5MB. <p>2) In case of Email</p> <ul style="list-style-type: none"> - It's possible to upload the image / video / audio / document file. - Max file size is up to 5MB.

3.6 Phone_Calls,Contacts

Question	Answer
How to backup Contacts?	<p>There are several ways as below.</p> <p>1. Copy it to SIM Card. [How to do] From contacts->Menu->More->Import/Export->Export to SIM.</p> <p>2. Copy it to SD Card. [How to do] From contacts->Menu->More->Import/Export->Export to SD Card.</p> <p>3. Synchronize it with Google server. [How to do] From Homescreen ->Menu->Setting->Data synchronization->Click Auto-sync.</p>
New contact created from phone can't be synchronized with G-mail.	<p>When contact is created, "contact type" should be set up to "Google contact" which you want to synchronize.</p> <p>[How to check] Contacts -> Menu -> New contact -> Select the Google contact(Google account which you want to synchronize) # If you select the "Handset", the created contact won't be synchronized with G-mail.</p>

Questiont	Answer
Is "Speed Call" supported?	<p>Currently, only VIV and TCL operator support speed dial.</p> <p>1. How to check</p> <p>1) Contacts -> Menu -> More -> select "Speed Dials"</p> <p>2) Select the dial expect for operator demanded fixed speed dial.</p> <p>3) select contact and then, set-up speed dial.</p> <p>Another way</p> <p>1) Contacts > select contact -> Menu > More > select "Speed Dials" > select number.</p> <p>- In case of selected Speed dial, push longer speed dial from Phone(Dialer) tab or after selecting speed dial, click "call button" operatoros requested fixed Speed dial is as follows.</p> <p>[VIV]</p> <p>1. Voicemail (Voicemail)</p> <p>2. Voice Portal (*2211)</p> <p>3. Vivo Informa (*365)</p> <p>4. Customer Care (*8486)</p> <p>[TCL]</p> <p>1. Voicemail (Voicemail)</p>

3.7 Application

Question	Answer
How to remove the installed application by user? # In case of built in application, it's impossible to be removed by user.	[How to do] Execute Menu -> Setting -> Applications -> Manage applications -> Downloaded -> select the application which you want to remove.
How to backup the applicatin installed by user?	LG mobile doesn't have program to back-up User's Apps. Please recommend to install the public back-up program (ex. "ASTRO File Manager") from market in advance.
How to calibrate for Compass?	The customer should have to do calibration for digital compass. [How to do] After executng the compass application, move the phone as the shape of "∞" for 2~3 seconds.
Is it possible to install application program into SD card.	[OS Limitation] It's possible. After application is installed inner memory, you can move application to SD card. [How to do] from home screen -> menu -> setting -> application -> manage application -> Click the "Move to SD card" * It is possible to move the application into SD, only if the menu icon is avaiable to click.

3.8 Utilities

Question	Answer
How to obtain the "Android PC suit program". # PC Sync means synchronizing PIM(personal information management)data such as contacts, calendar, E-mail and MP3, Video, Picture...	Download "LG Mobile Support Tool" from the below website. [How to download 'LG Mobile Support Tool'] WWW.lg.com -> Select Your Region -> Select Your country -> Support -> Mobile phone support -> Click "Download" [How to do] Execute "LG Mobile Support Tool" -> "Customer Support -> "Application, Manual & USB Driver Download" -> Input IMEI & Model & Serial No -> Download PC Sync program
Is Power off Alarm supported?	No, it's not supported. [OS Limitation] Android phone does not support the function of power-off alarm.

3.9 Bluetooth

Question	Answer
Is it possible to update BT profile on the phone?	No, it's impossible.
What are the supported profiles for Bluetooth?	Please refer to the model manual about the detail profiles.

3.10 Wi-Fi

Question	Answer
In the status that the customer turn on both Wifi and 3G data service, which one have higher priority?	Wifi service have higher priority than 3G data service when both of them are available at the same time.
How to obtain the Wifi MAC address?	[How to check MAC address] From Homescreen->Menu->Setting->About phone ->Status->Wifi MAC address.
How to check the wifi when the customer can't access internet from the AP(Access point)?	1. In case of DHCP IP AP has a limitation of IP allocation. It's possibility AP can't allocate the IP address anymore due to capacity. Hence, try to access the AP again after resetting AP. If possible, pls, update the F/W of AP. 2. In case of static IP 1) After setting the IP by the customer, User should have to save it. [How to do] From Homescreen-> Menu->Setting->Wiress & network settings->Wifi setting->Menu->advanced->Check "Use static IP" 2) Input all information. - IP address / Gateway / Netmask / DNS 1 / DNS 2
Supported protocol for Wifi?	802.11 b/g
Wifi-hot spot can be supported?	[How to do] From Home screen -> Menu --> Settings --> Wireless & networks --> Portable hotspot -> Turn on "Portable Wi-Fi hotspot" --> Go into "Portable Wi-Fi hotspot" --> Go into "Configure Wi-Fi hotspot" --> Setup Network SSID / Security / Password

Question	Answer
How many wireless device can access the phone which is setup as Wifi Hot spot?	It is possible to be available 5 ~ 7 ea in case of the normal model. Please refer to the model manual about the detail contents.

3.11 Android

Question	Answer
What is the Android 2.2 better than the Android 2.1?	Please refer to the below table
To Compare between 2.1 / 2.2 / 2.3	
2.0 / 2.1 Android(Eclair)	Optimization of H/W speed. Support better big screen and resolution. Revamped UI. New browser UI and supporting HTML5. New connect index. The better Black/White ratio for background. Improvement of google map 3.1.2 Support to Microsoft exchange. Support the inner flash for camera. Digital zoom. The motion event class to chase multi touch event. Improvement virtual keyboard. Bluetooth 2.1 Live background screen.

Question	Answer
To Compare between 2.1 / 2.2 / 2.3	
2.2 Android(froyo)	<p>General Android OS's speed, memory and Optimization the performance.</p> <p>Improvement of practical program speed (using JIT)</p> <p>Unification browser application of Crom V8 java script engine.</p> <p>Strengthen supporting microsoft exchange (secure principle, automatic recovery, search GAL, synchronize date, wifing remote).</p> <p>Going directly a phone and browser application and Improvement of application luncher.</p> <p>USB tethering and Wifi hotspot function.</p> <p>Support market practice program include whole and automatic update funtion.</p> <p>Quick change between dictionary and keyboard lauguage.</p> <p>Sharing contact and voice call using bluetooth.</p> <p>Support of file upload field at the browser application.</p> <p>Support of installing application in external memory.</p>
3.0 Android(Gingerbread)	<p>Supprot the WebM video playing.</p> <p>Improved copy and paste funtion.</p> <p>Support the FLAC play.</p> <p>Available to Android market browsing at a desktop.</p> <p>Android market music store.</p> <p>The media streaming of PC library.</p>

3.12 P500 And2.2

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
7	Android 2.2	P500 /P509	Application	Setting		O	X



Category	Sub_Category	Question	Answer
Phone Function	Digital Compass	How to calibrate for Compass?	<p>The customer should have to do calibration for digital compass.</p> <p>[How to do]</p> <p>After executng the compass application, move the phone as the shape of "∞" for 2~3 seconds.</p>



Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28							

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
11	Android 2.2	P500 /P509	Home	Setting		O	X



Category	Sub_Category	Question	Answer
Phone Function	Home menu	Is it possible to remove application Icon in home menu?	Yes, It's possible. [How to do] Long press the icon which customer want to remove and then drag and drop it to trash can.




Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28							

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
35	Android 2.2	P500 /P509	Home	Setting		O	X



Category	Sub_Category	Question	Answer
Phone Function	Home menu	How to change the Home screen?	Officially, it only provides LG Home. If you want to add the home screen, pls, download the Home launcher program from the Android market.



Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28							

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
8	Android 2.2	P500 /P509	Internet	Setting		O	X



Category	Sub_Category	Question	Answer
Phone Function	Tethering	Is it possible to use tethering with P500 Android 2.2?	<p>Yes, it's supported.</p> <p>From Homescreen -> Settings -> Wireless & network settings -> Tethering & Portable hotspot -> check "USB tethering" (Phone should be connected with 3G network)</p> <p># In case of Android 2.1, you need to download the DUN application from the Market. (Ex. PDA Net)</p>



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No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
20	Android 2.2	P500 /P509	Internet	Setting		O	X



Category	Sub_Category	Question	Answer
Mobile network	Data connection	<p>What is the APN Setting?</p> <p>(From Homescreen -> Menu -> Settings -> Wireless controls -> Mobile networks -> Access Point Names(APN) -> New APN</p>	<p>1. When the customer use this option?</p> <p>1) In case of using other operator's SIM card 2) In case of using prepaid SIM card 3) In case of using phone which is for open market.</p> <p>2. Where the customer get the setting information?</p> <p>Basically, if you set the Name & APN, the rest of option will be set automatically.</p> <p>Most of information is depend on carrier. hence, the customer should have to inquire them to carrier.(APN address / Customer name / Password...)</p>



NEXT TO GO 42page

Released Date	Step 1
2010.09.28	

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
34	Android 2.2	P500 /P509	Message/E-mail	Setting		O	X



Category	Sub_Category	Question	Answer																								
Google Service	G-Mail Account	Is it possible to change Log-in account or remove?	<table border="1"> <tr> <th rowspan="2">Protocol</th><th colspan="2">Detection Behavior</th><th rowspan="2">Type</th></tr> <tr> <th>In device</th><th>In server</th></tr> <tr> <td rowspan="2">POP3</td><td>Move it to trash box</td><td>No change</td><td rowspan="2">Asynchronous</td></tr> <tr> <td>Delete it from trash box</td><td>No change</td></tr> <tr> <td rowspan="2">IMAP</td><td>Move it to trash box</td><td>Move it to trash box</td><td rowspan="2">Synchronous</td></tr> <tr> <td>Delete it from trash box</td><td>Delete it from trash box</td></tr> <tr> <td rowspan="2">Exchange</td><td>Move it to trash box</td><td>Move it to trash box</td><td rowspan="2">Synchronous</td></tr> <tr> <td>Delete it from trash box</td><td>Delete it from trash box</td></tr> </table>	Protocol	Detection Behavior		Type	In device	In server	POP3	Move it to trash box	No change	Asynchronous	Delete it from trash box	No change	IMAP	Move it to trash box	Move it to trash box	Synchronous	Delete it from trash box	Delete it from trash box	Exchange	Move it to trash box	Move it to trash box	Synchronous	Delete it from trash box	Delete it from trash box
Protocol	Detection Behavior		Type																								
	In device	In server																									
POP3	Move it to trash box	No change	Asynchronous																								
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	Delete it from trash box	Delete it from trash box																									
Exchange	Move it to trash box	Move it to trash box	Synchronous																								
	Delete it from trash box	Delete it from trash box																									



Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28							

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
30	Android 2.2	P500 /P509	Multimedia	Setting		O	O



Category	Sub_Category	Question	Answer
Phone Function	Alram	How to setup the Alarm ring tone by MP3 file?	Go to 48~49 page (How to set up MS Exchange #1/ How to set up MS Exchange #2)



Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28							

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
6	Android 2.2	P500 /P509	Phone(Calls/ Contacts)	Setting		O	O




Category	Sub_Category	Question	Answer
Data	Contacts Backup	How to setup the Alarm ring tone by MP3 file?	<p>There are several ways as below.</p> <p>1. Copy it to SIM Card. [How to do] From contacts->Menu->More->Import/Export->Export to SIM</p> <p>2. Copy it to SD Card. [How to do] From contacts->Menu->More->Import/Export->Export to SD Card</p> <p>3. Synchronize it with Google server. [How to do] From Homescreen ->Menu->Setting->Data synchronization->Click Auto-sync</p>



Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28							

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
1	Android 2.2	P500 /P509	Utilities	Setting		O	X



Category	Sub_Category	Question	Answer
Phone Function	PC Sync program	How to obtain the "Android PC suit program". # PC Sync means synchronizing PIM(personal information management)data such as contacts, calendar, E-mail and MP3, Video, Picture...	 LGE Android USB Modem #4: Download "LG Mobile Support Tool" from the below website. - WWW.lg.com or update.lgmobile.com [How to do] Execute "LG Mobile Support Tool" -> "Customer Support" -> "Application, Manual & USB Driver Download" -> Input IMEI & Model & Serial No -> Download PC Sync program # P509(TMUS) is not supportieve according to the operator request.



Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28	Go to 50 page						

No.	OS	Model	1st Category	2nd Category	Remark	CIC	Web
22	Android 2.2	P500 /P509	Wi-Fi	Setting		O	X

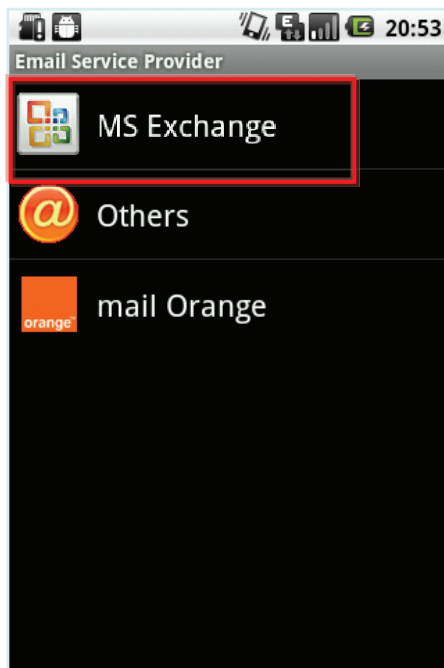


Category	Sub_Category	Question	Answer
Phone Function	Wifi MAC Address	How to obtain the Wifi MAC address?	[How to do] From Homescreen->About phone ->Status->Wifi MAC address.

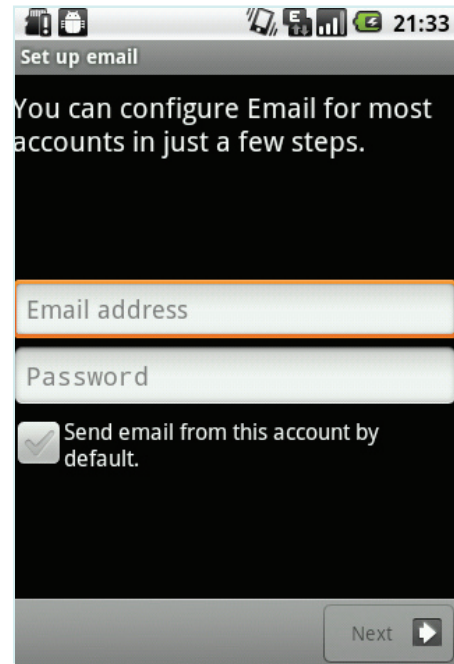


Released Date	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7
2010.09.28							

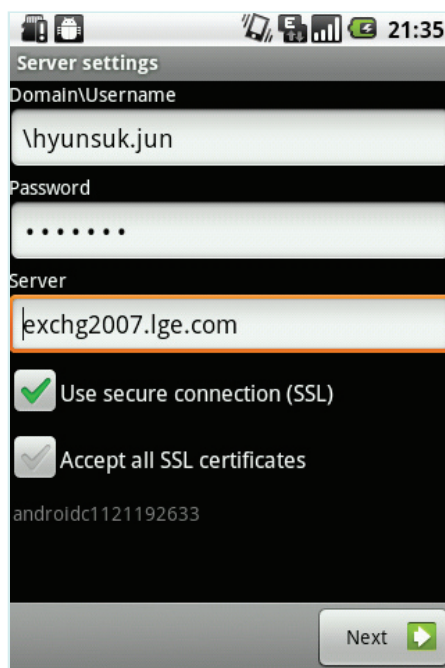
How to set up MS Exchange #1



1. Select MS Exchange as below

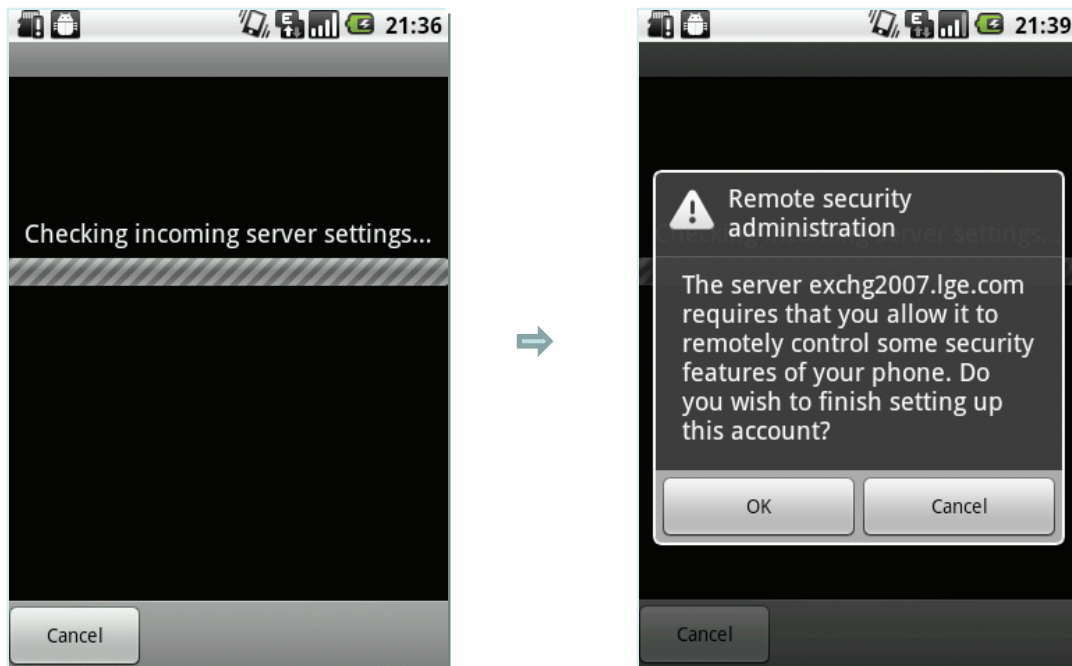


2. Input Email address/Password

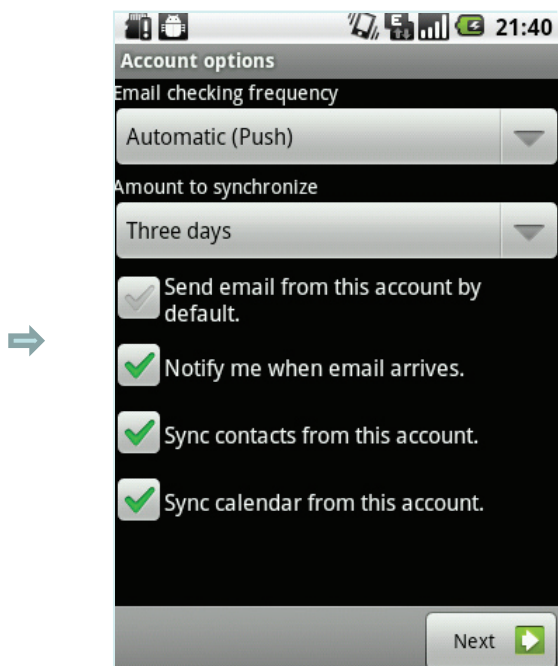


3. Input Server info, and detailed info

How to set up MS Exchange #2



4. Checking incoming server setting



6. Select the sync option.

5. If the Security feature is setup in Server. This popup will be shown. Otherwise, this popup won't be shown.

주소(1) https://exchg2007.lge.com/owa/TreeOptionsSoftware-Messaging

연결 연결 사용자 정의 Windows Windows Media 링크 사용자 정의 SSO

Microsoft Office Outlook Web Access

로그아웃 도움말

홈선 저장

국가별 설정
회사 설정
맞춤법 검사
일정 옵션
부재 중 알림
규칙
전자 메일 보안
체크 메일
암호 변경
일반 설정
① 모바일 장치
정보
버전: 6.1.393.1

메일
일정
연락처
작업
문서
공용 폴더

모바일 장치

모바일 장치를 관리합니다.
더 이상 사용하지 않는 장치를 제거할 수 있습니다. 장치 암호를 잊어버린 경우 여기서 장치에 액세스할 수 있습니다. 휴대폰이나 모바일 장치를 분실한 경우 원격 장치 지우기를 초기화하여 장치를 보호할 수 있습니다.
새 장치를 추가하려면 해당 장치에서 Microsoft Exchange와의 파싱너 관계가 시작되도록 설정하여 아래 목록에 나타나게 하십시오.

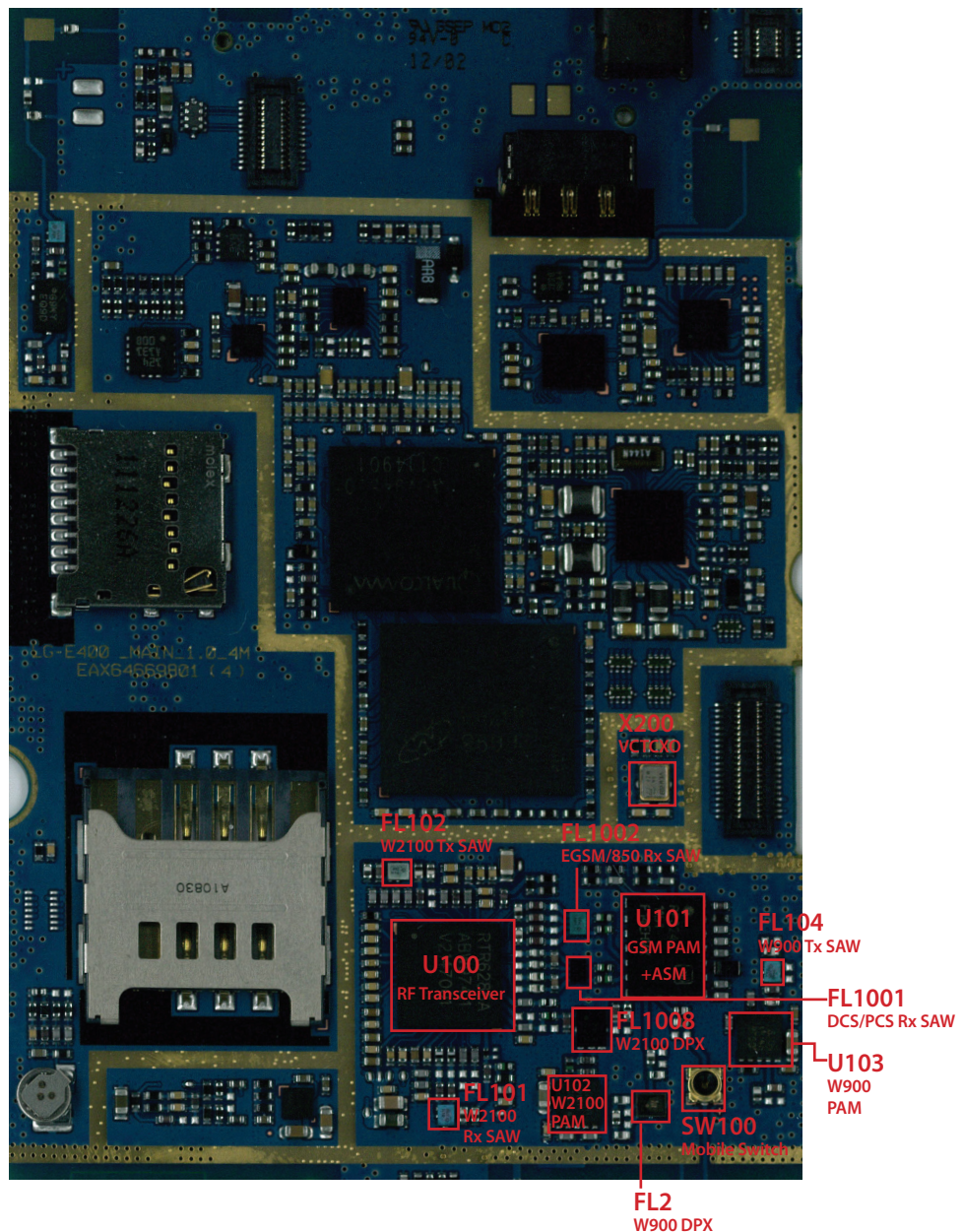
② Remove the device from the below list

장치	마지막 동기화 시간	상태
Android	2010-09-30 (목) 오후 10:05	확인
Android	2010-09-30 (목) 오후 8:34	확인
Android	2010-09-30 (목) 오후 8:34	확인
SmartPhone	2010-09-30 (목) 오후 8:34	확인
Android	2010-09-30 (목) 오후 8:14	확인
LGMCGT540	2010-09-30 (목) 오후 7:32	확인
Android	2010-09-30 (목) 오후 5:09	확인
SmartPhone	2010-09-30 (목) 오후 5:06	확인

첫 번째 동기화 대상: 2010-09-17 (금) 오전 10:30
마지막으로 성공한 동기화: 2010-09-30 (목) 오후 8:34
장치 ID: androidc1121192633
사용자 에이전트: Android/3.0

4. TROUBLE SHOOTING

4.1 RF Component

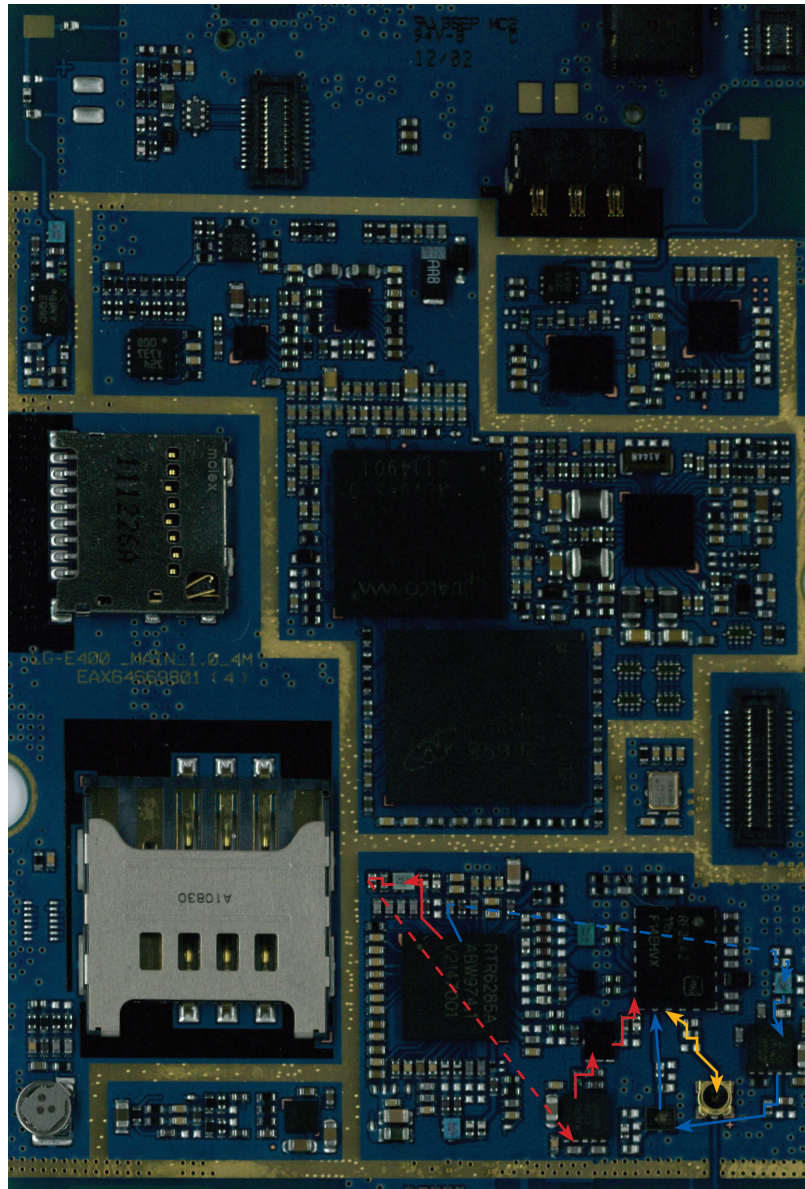


4. TROUBLE SHOOTING

RF component (WCDMA / GSM)

Reference	Description	Reference	Description
U100	RTR6285A(Transceiver)	FL2	WCDMA (VIII) Duplexer
U101	GSM TX Module (ASM+GSM PAM)	FL101	WCDMA (I) RX SAW Filter
U102	WCDMA (I) PAM	FL1002	EGSM/850 Rx saw filter
U103	WCDMA (VIII) PAM	FL1001	DCS/PCS Rx saw filter
FL102	WCDMA (I) TX SAW Filter	X200	VCTCXO(19.2MHz)
FL104	WCDMA (VIII) TX SAW Filter	SW100	RF Antenna Connector
FL1008	WCDMA (I) Duplexer		

4.2 SIGNAL PATH



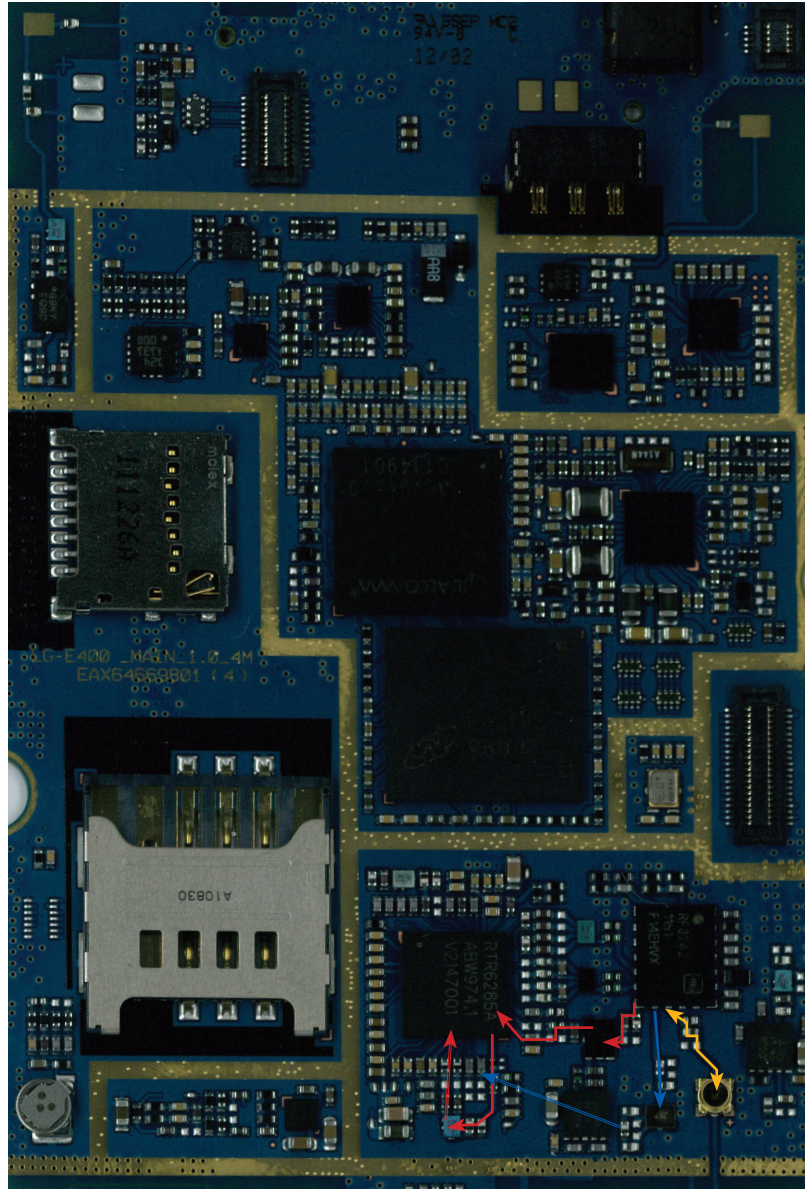
WCDMA I and VIII Band TX Signal PATH

D2. WCDMA 2100 TX PATH

E2. WCDMA 900 TX PATH

F1. COMMON TX/RX PATH

4. TROUBLE SHOOTING



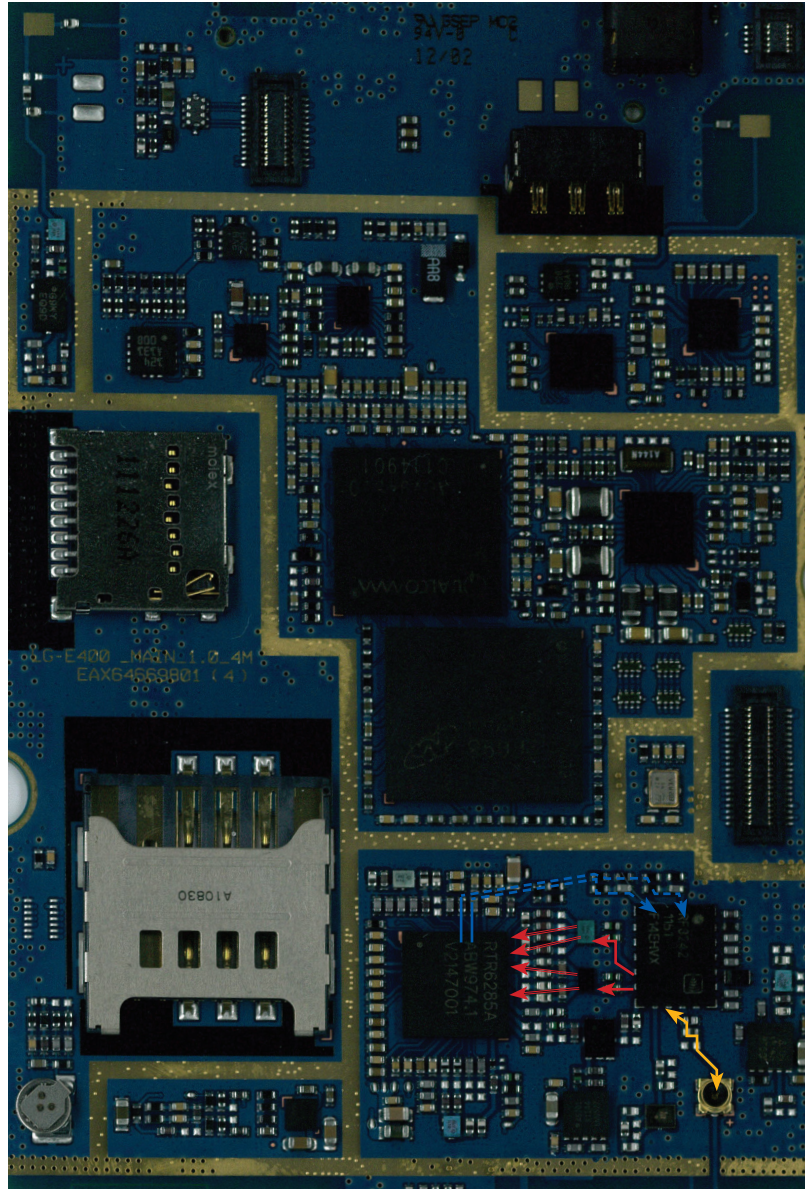
WCDMA I and VIII Band TX Signal PATH

D2. WCDMA 2100 TX PATH

E2. WCDMA 900 TX PATH

F1. COMMON TX/RX PATH

4. TROUBLE SHOOTING



GSM850/GSM900/DCS/PCS's RX/TX Signal PATH

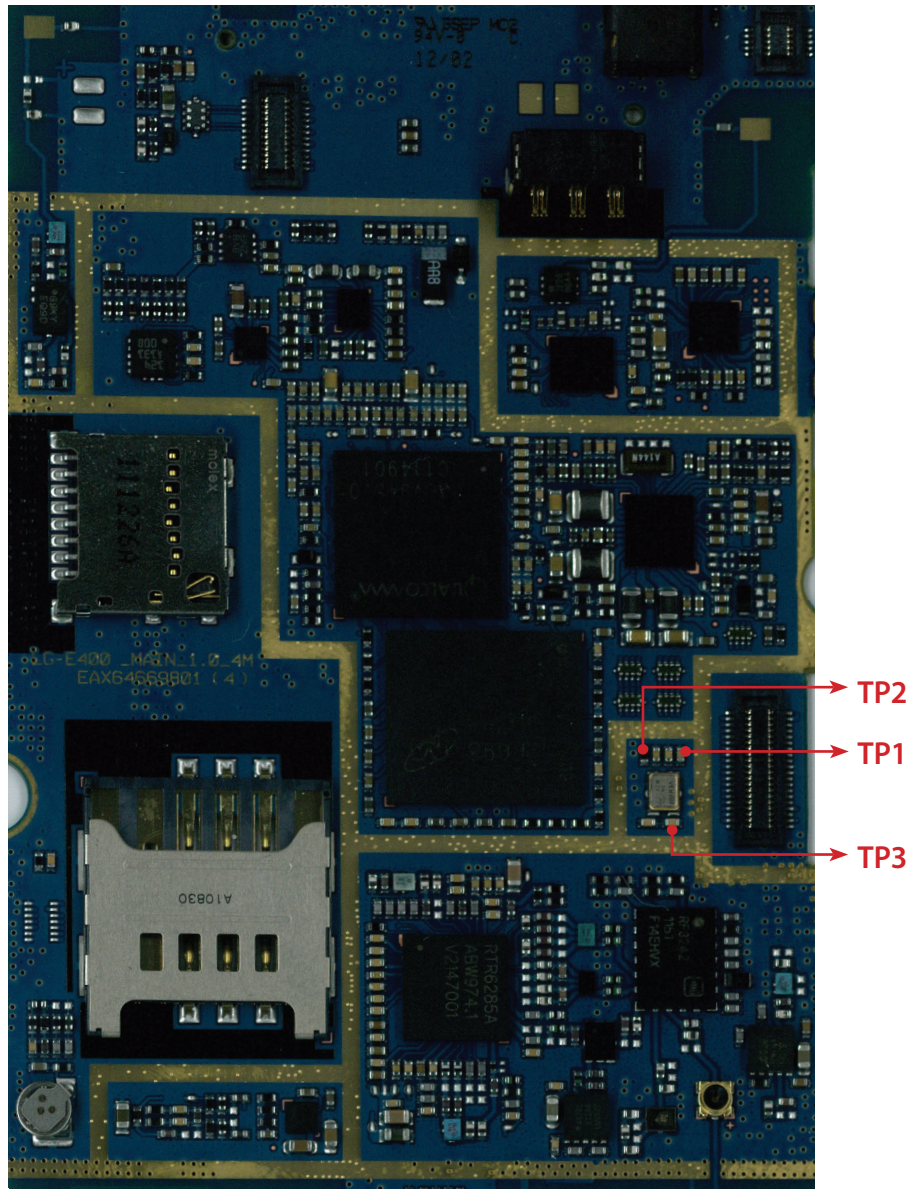
A. GSM850/GSM900/DCS1800/PCS1900 RX PATH

B. GSM850/GSM900/DCS1800/PCS1900 TX PATH

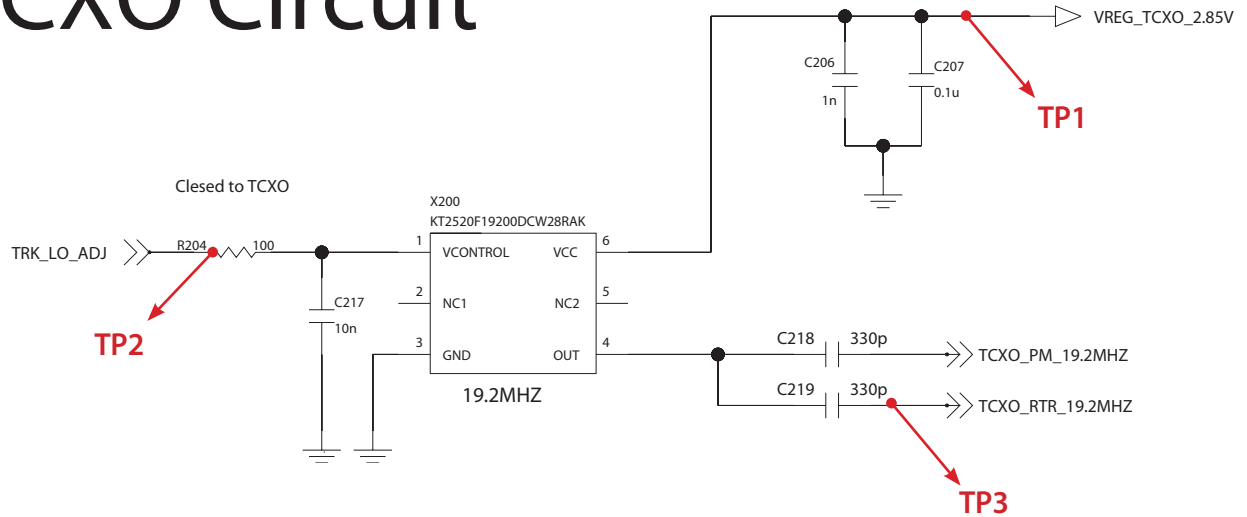
C1. COMMON TX/RX PATH

4.3 Checking TCXO Block

The output frequency (19.2MHz) of TCXO (X2001) is used as the reference one of RTR6285 and PM7540 internal VCO.

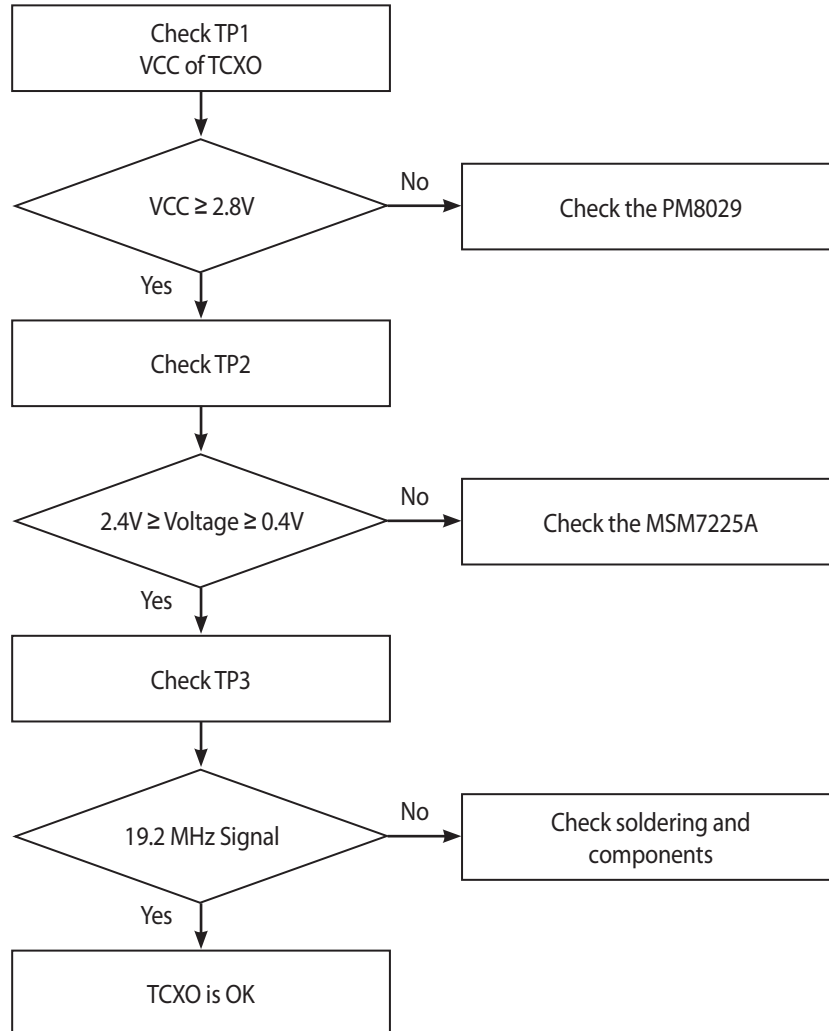


TCXO Circuit

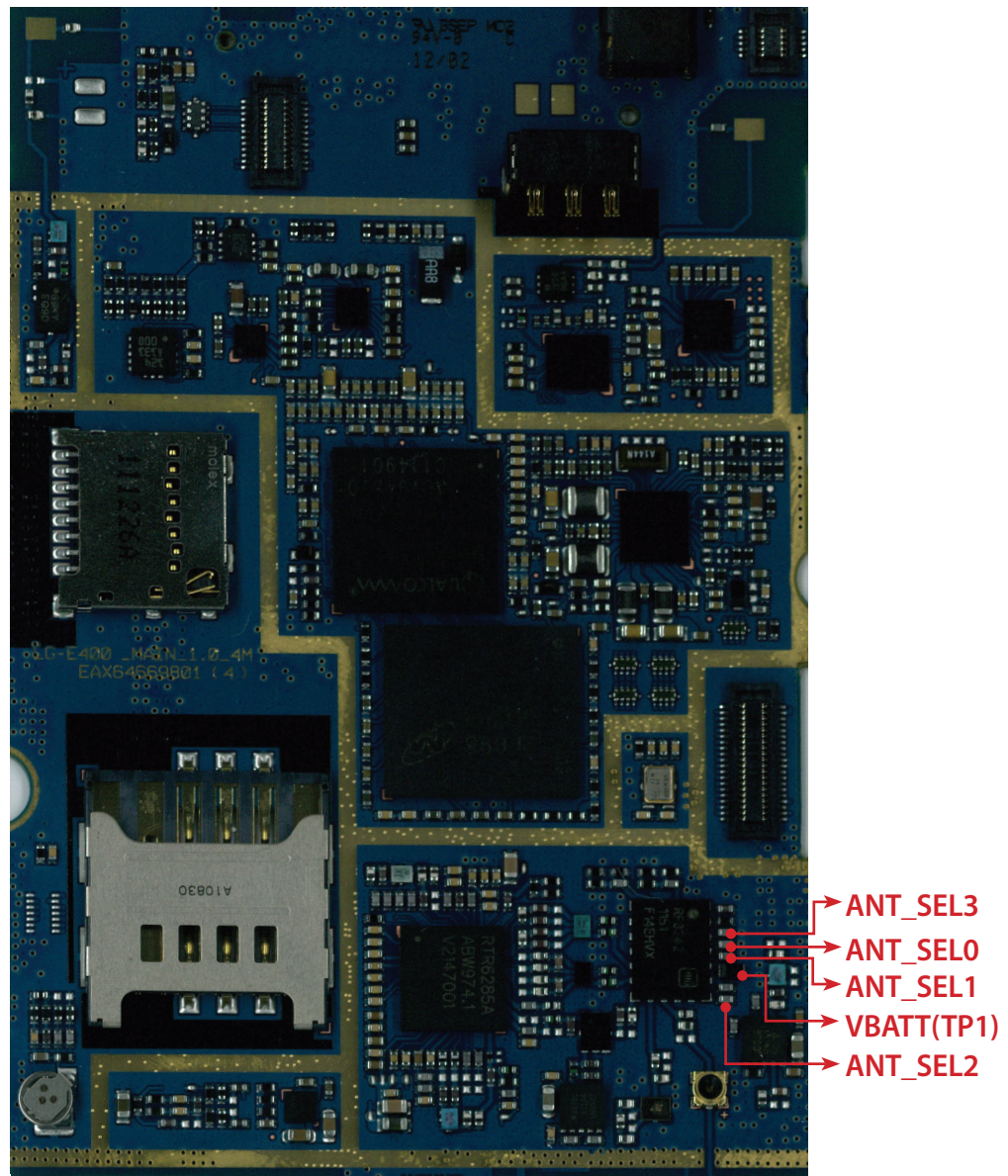


Schematic of the Crystal Part (19.2MHz)

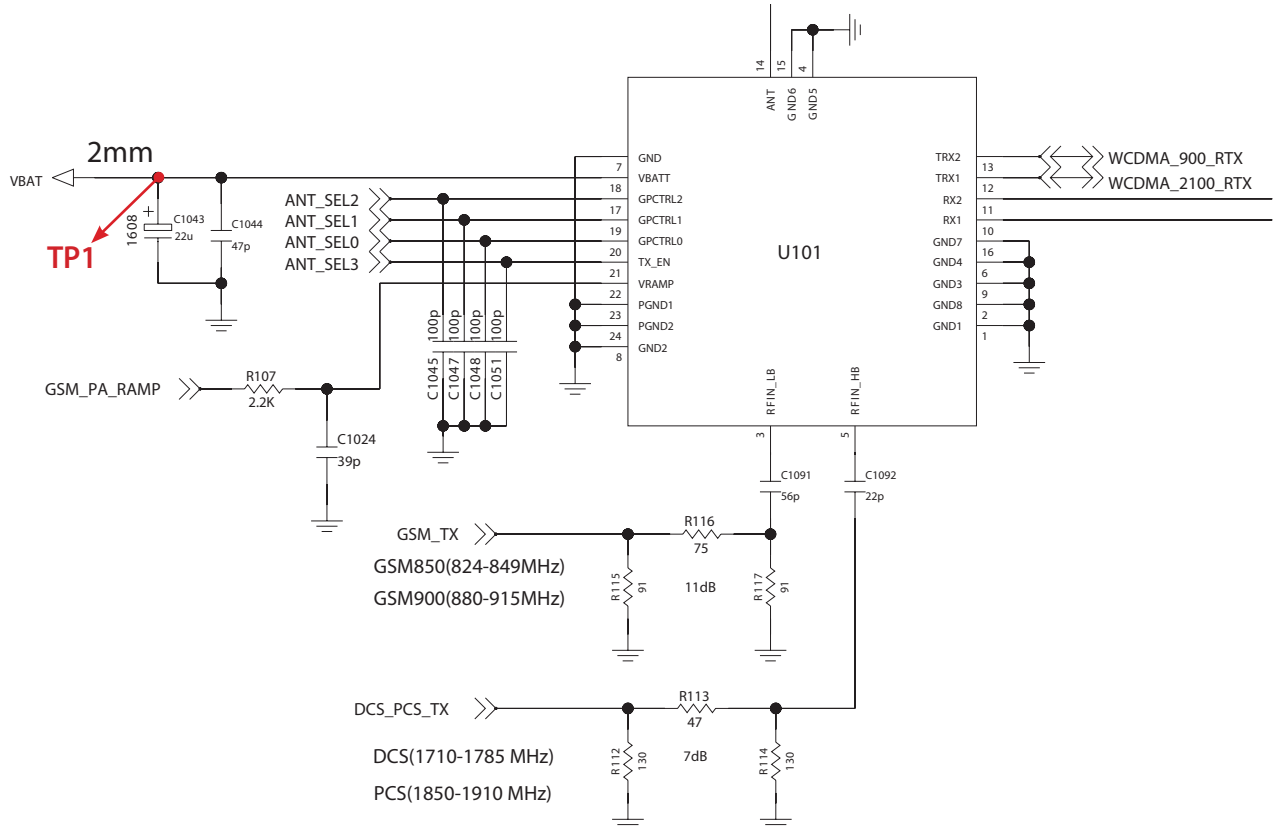
4. TROUBLE SHOOTING



4.4 Checking GSM TX Module(GSM PAM + ASM) Block



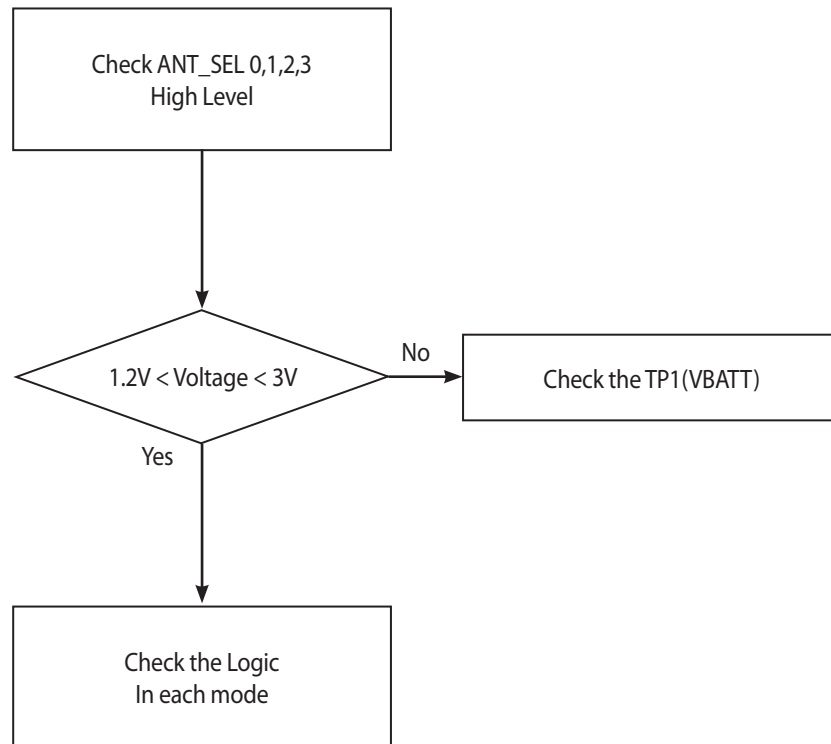
4. TROUBLE SHOOTING



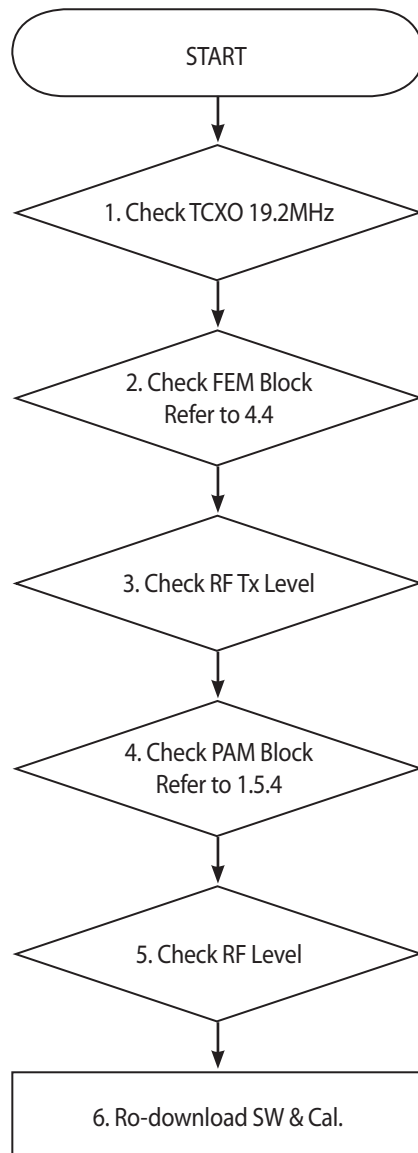
Module Control and Antenna Switch Logic

ANT_SEL 3	ANT_SEL 2	ANT_SEL 1	ANT_SEL 0	Tx Module Mode
0	0	0	0	Standby
0	1	0	0	Rx1
0	0	1	0	Rx2
0	0	1	1	TRX1
0	0	0	1	TRX2
1	0	1	0	Low Band GMSK
1	0	1	1	High Band GMSK

Checking Switch Block Power Source



4.5 Checking WCDMA Block



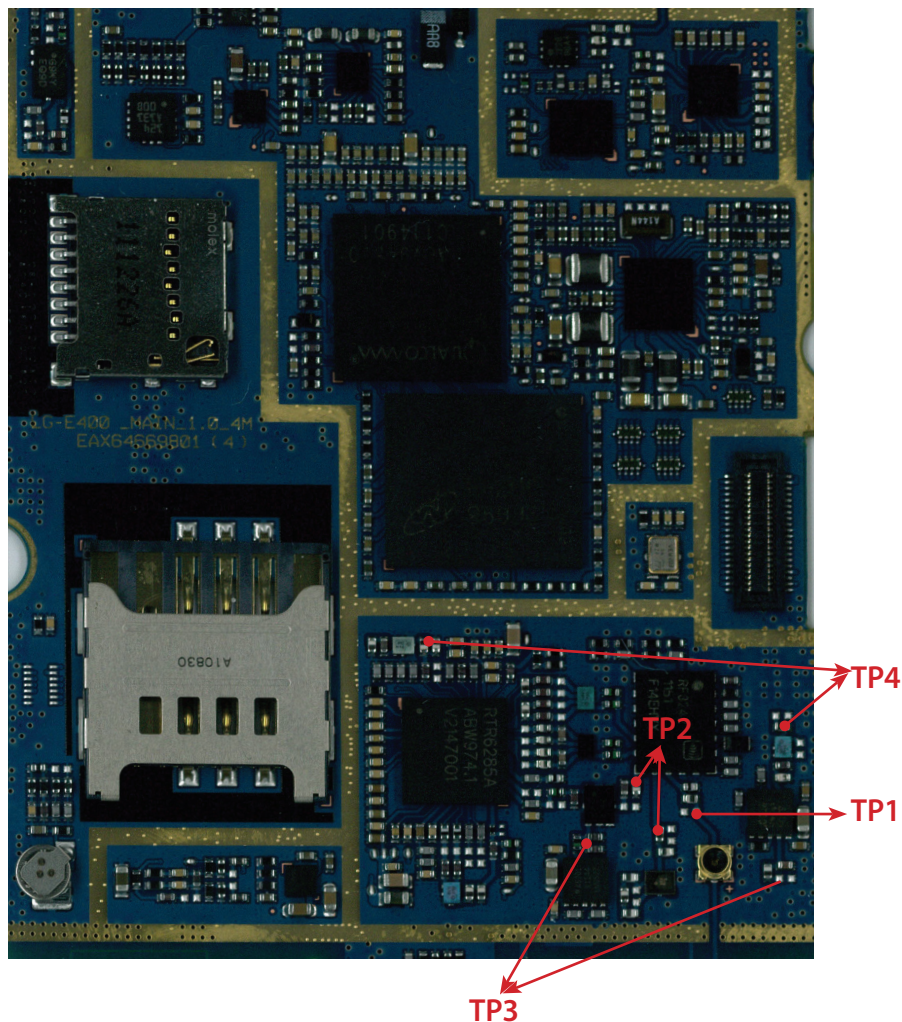
4.5.1 Checking TCXO Block

Refer to 4.3

4.5.2. Checking Tx Module Block

Refer to 4.4

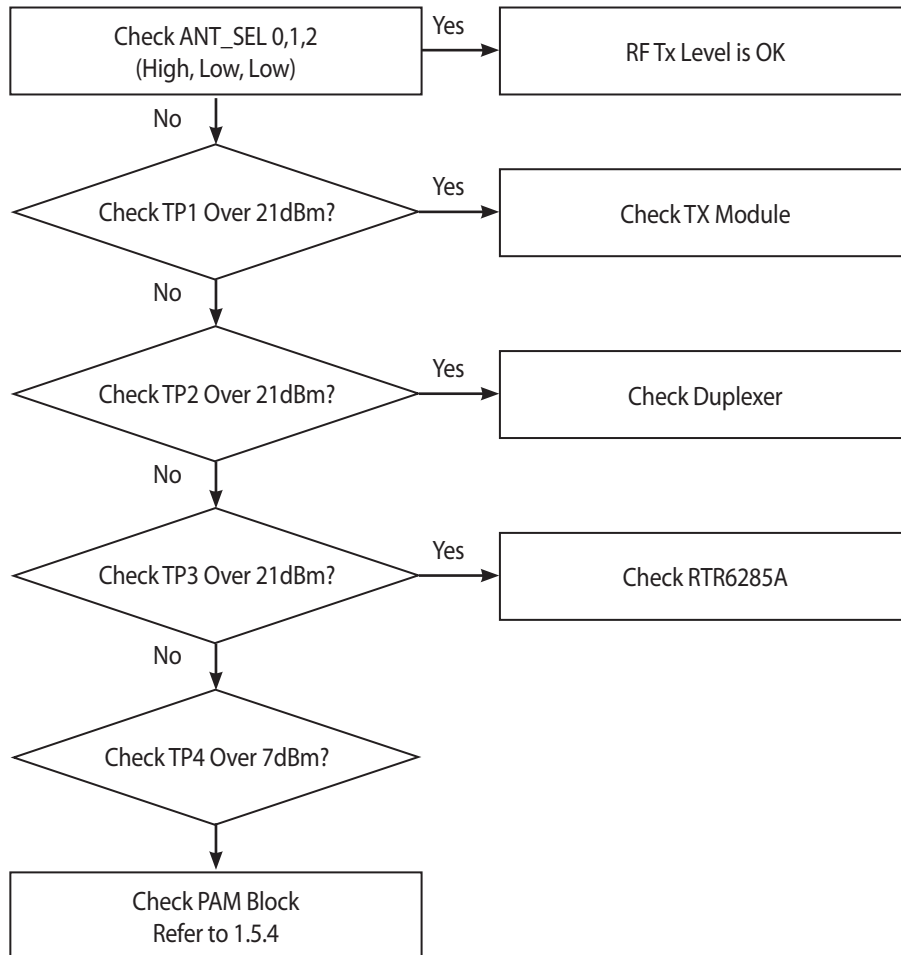
4.5.3. Checking RF TX Level



Test Point (TX Level)



4. TROUBLE SHOOTING



RTR6285 Maximum output Power = 7 dBm
RTR6285 minimum output Power = -80 dBm
PAM(ACPM-5281) = Maximum input Power = 10 dBm

4.5.4. Checking PAM Block

PAM Control Signal

PA_ON0 (C185), PA_ON1(C201) : PAM Enable

PA_R0: PAM Gain Control

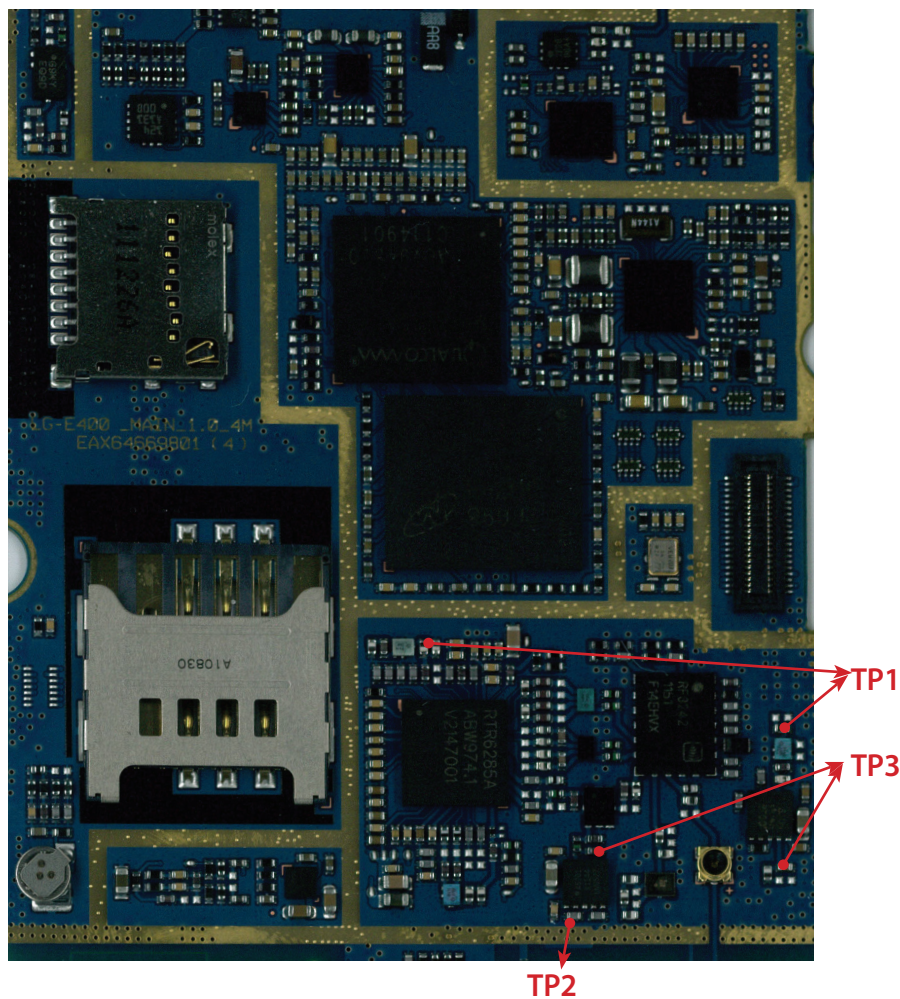
PA_ON must be HIGH (over 2.6V)

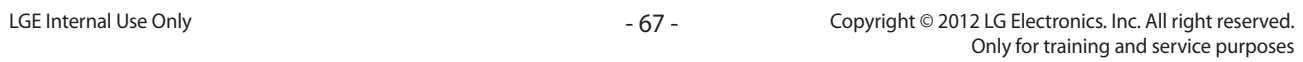
PAM IN/OUT Signal :

When PAM is under the operation of high power mode (PA_R0(C185) : Low),

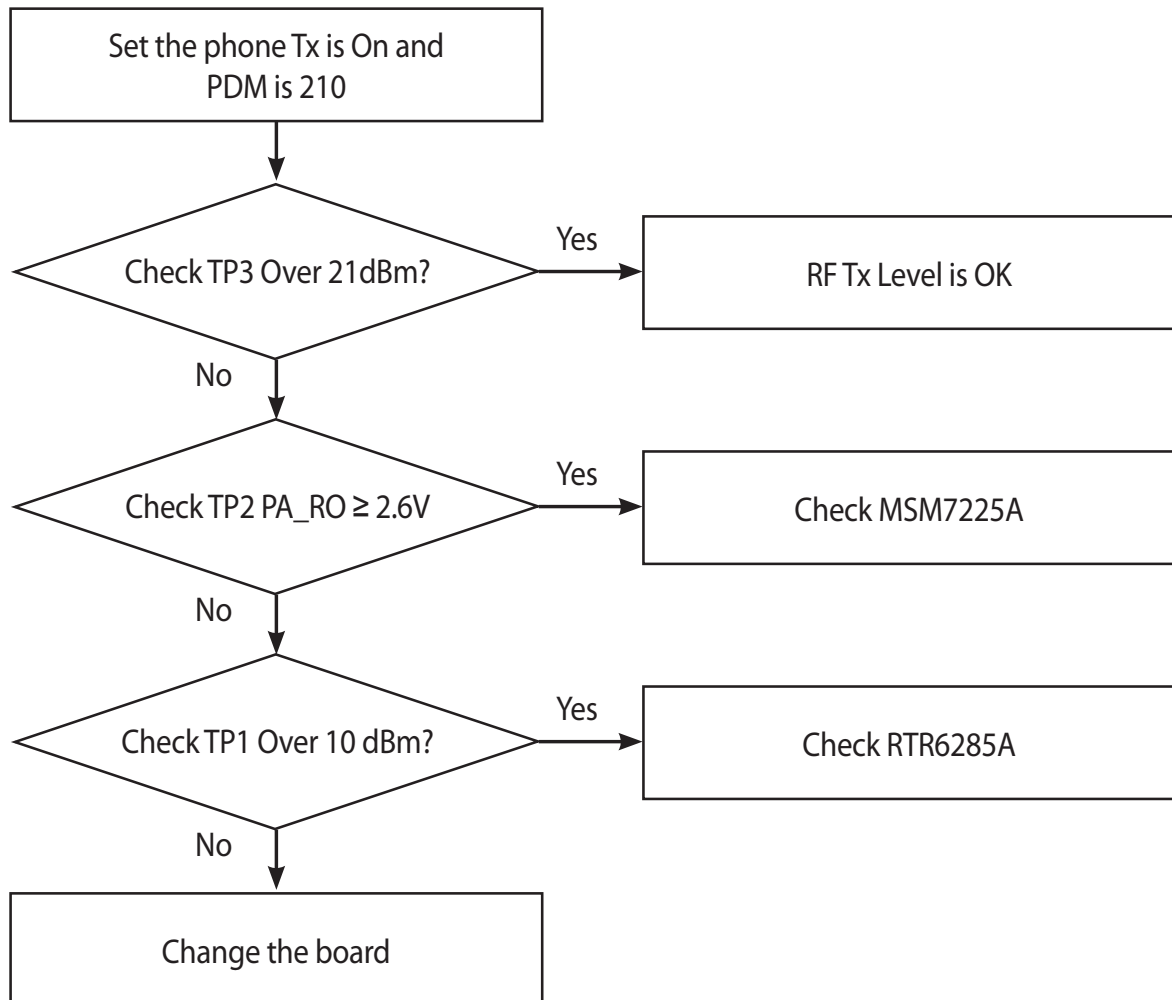
PAM OUT power must be over 21 dBm

PAM IN power must be under 10 dBm



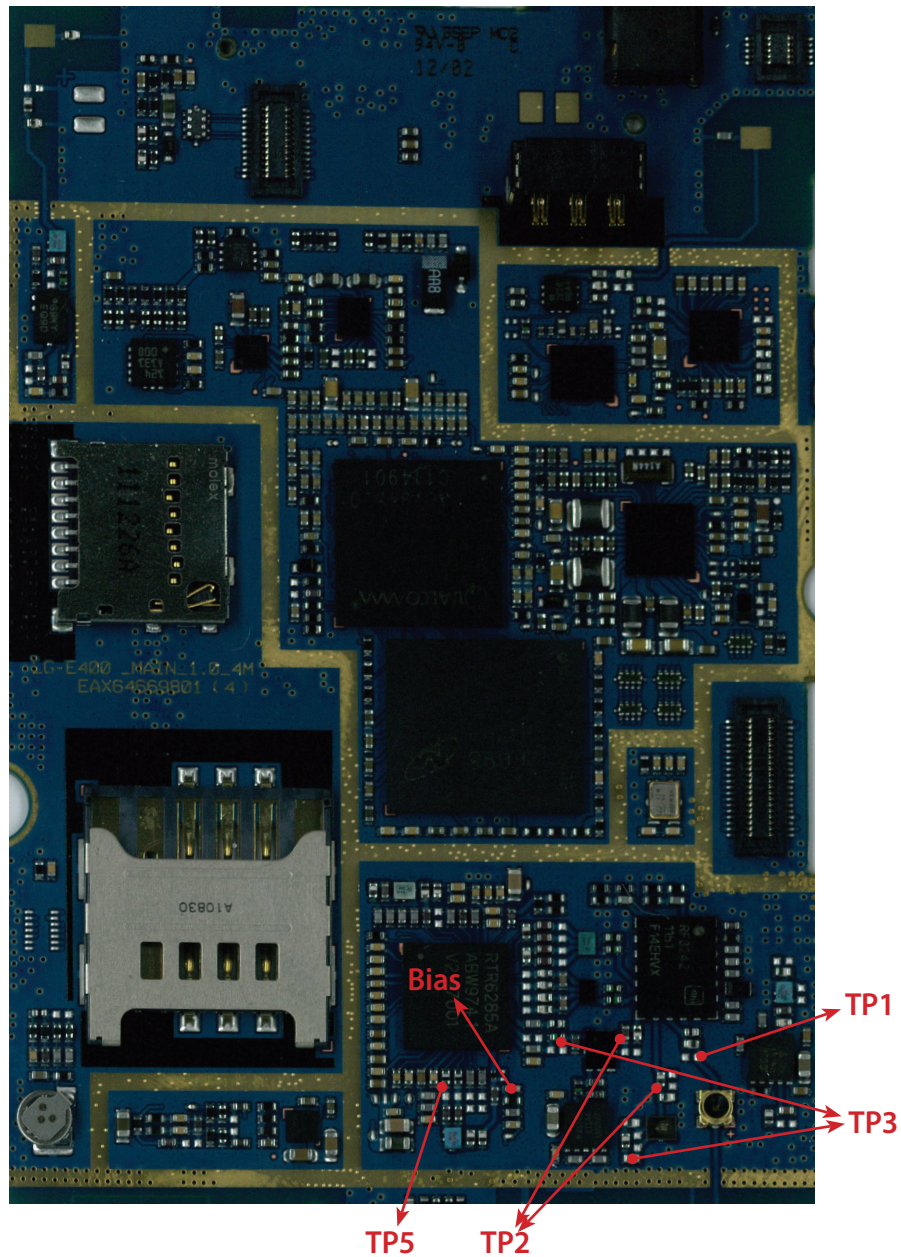


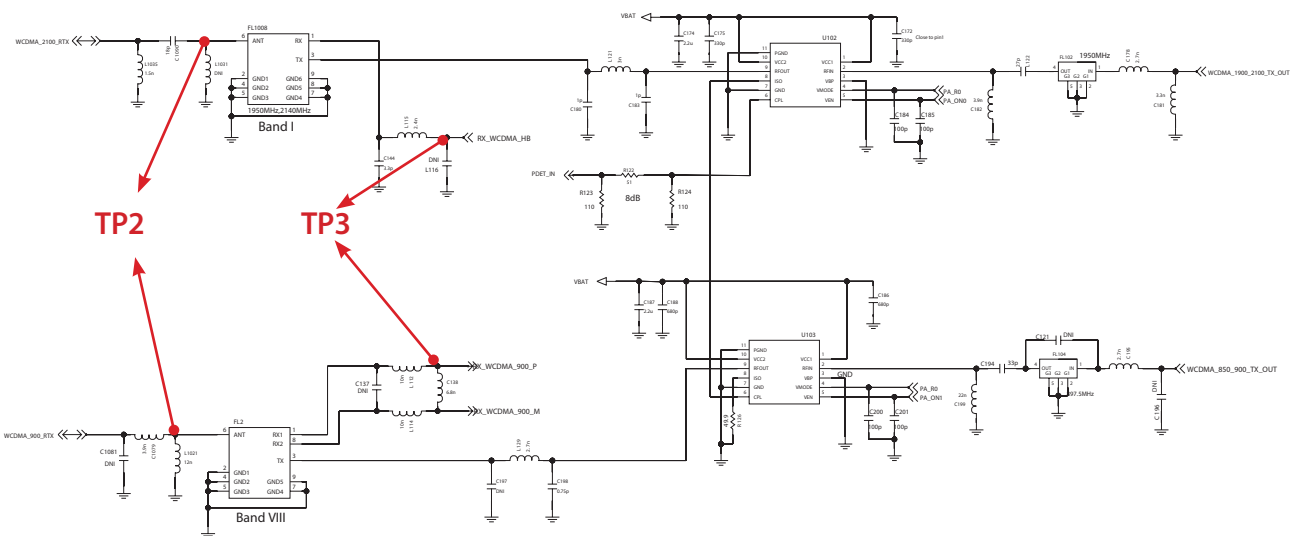
4. TROUBLE SHOOTING

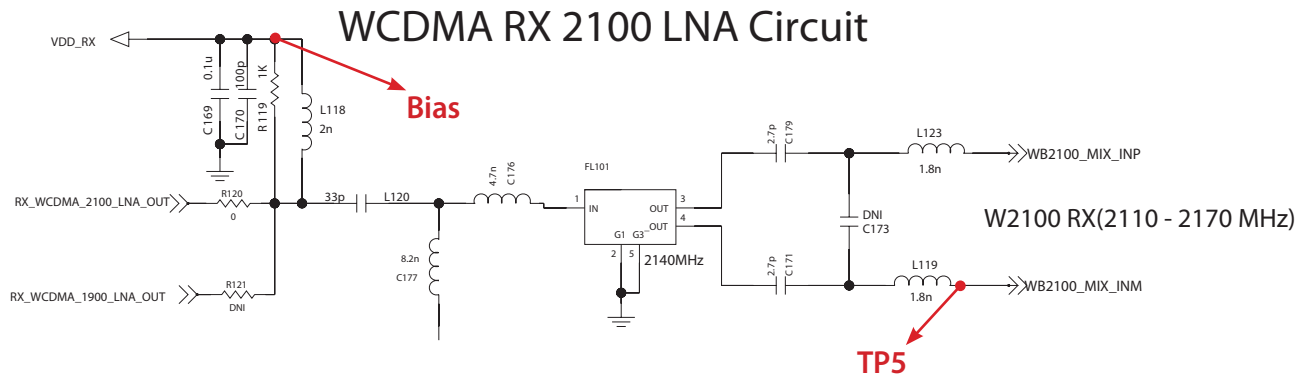


4.5.5. Checking RF Rx Level

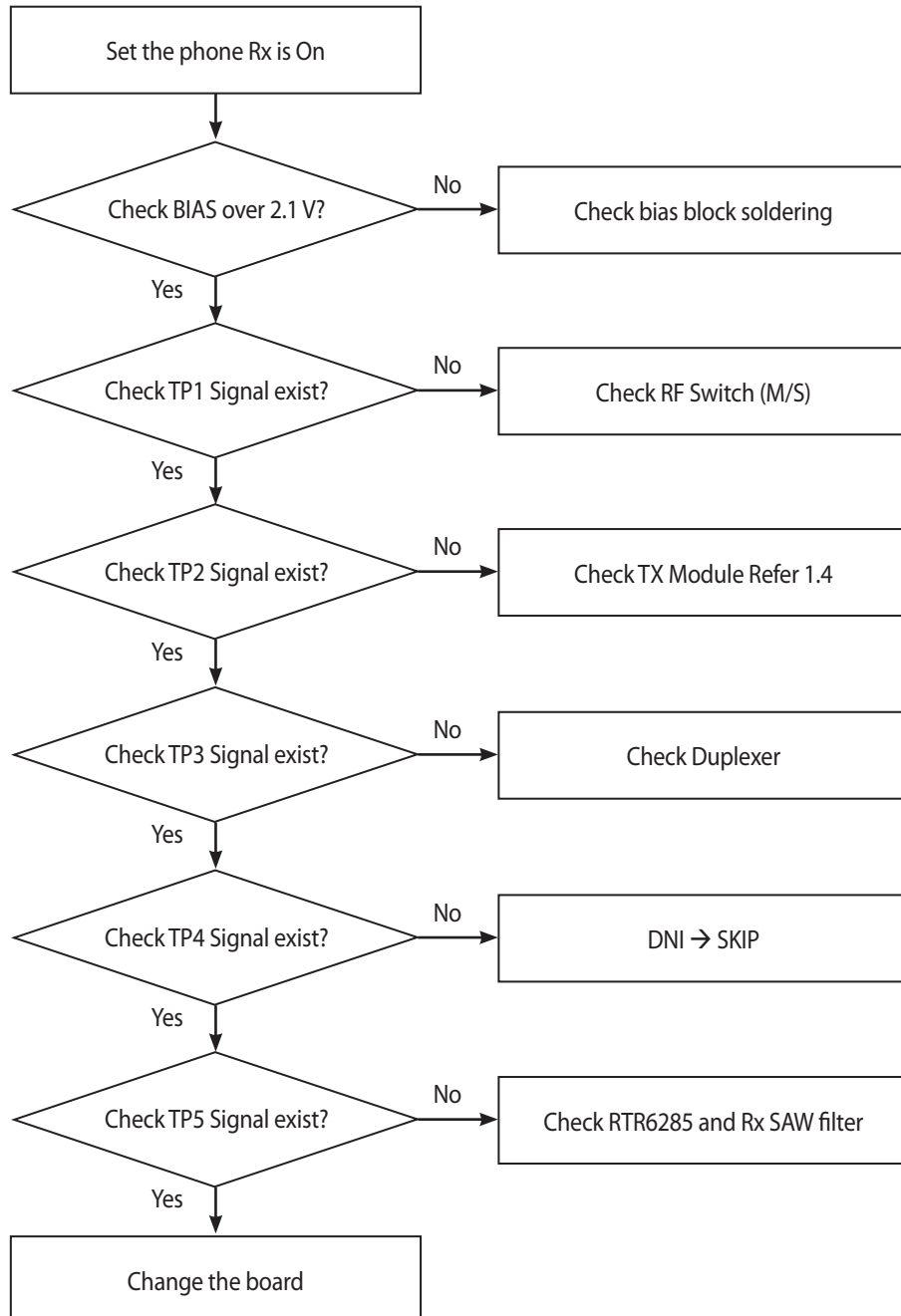
Test Point (RF Rx Level)



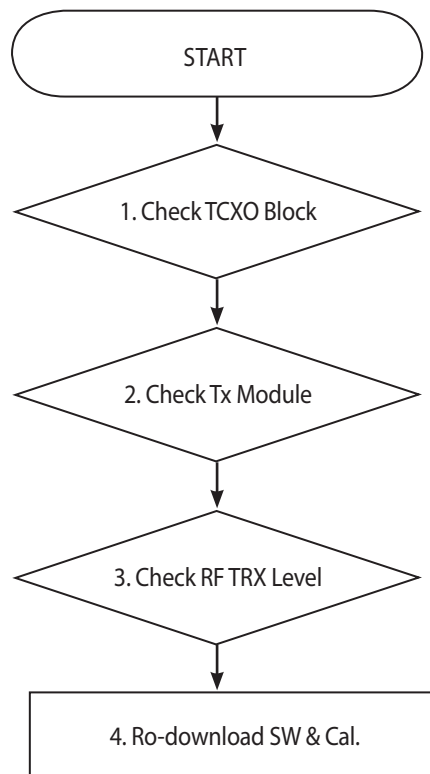




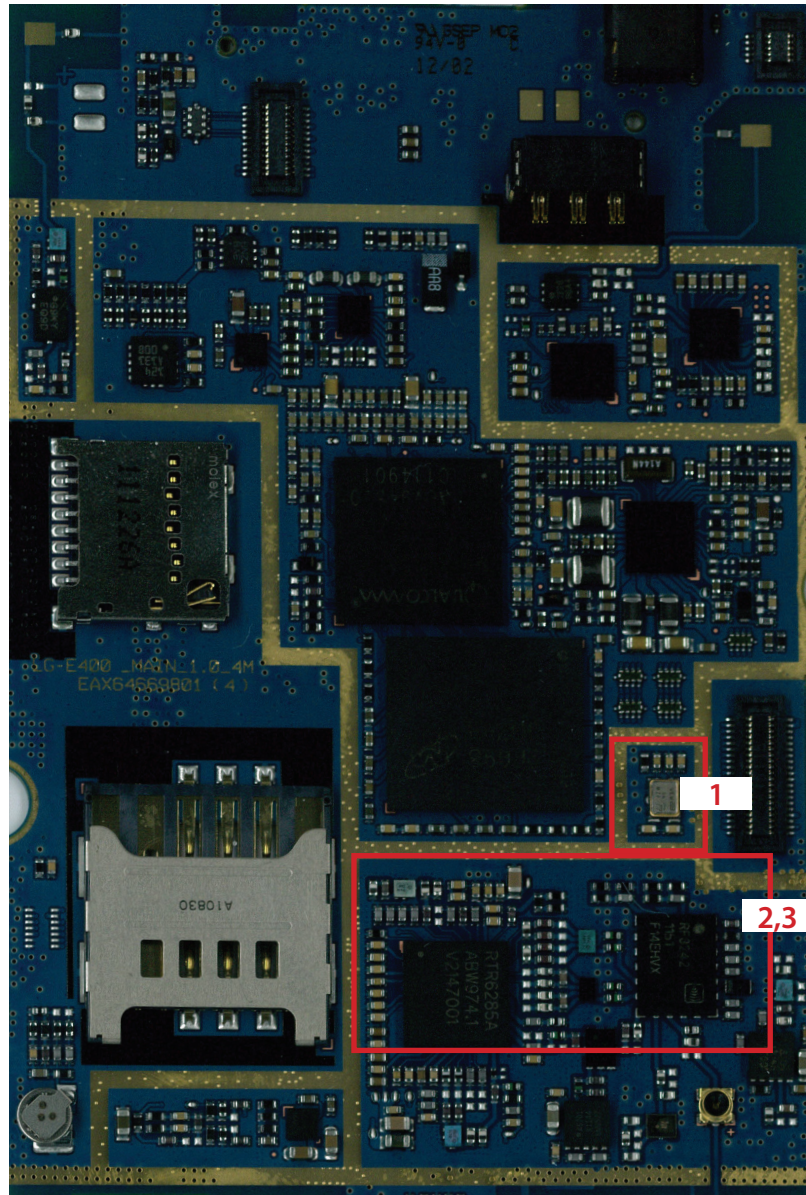
4. TROUBLE SHOOTING



4.6 Checking GSM Block



4. TROUBLE SHOOTING



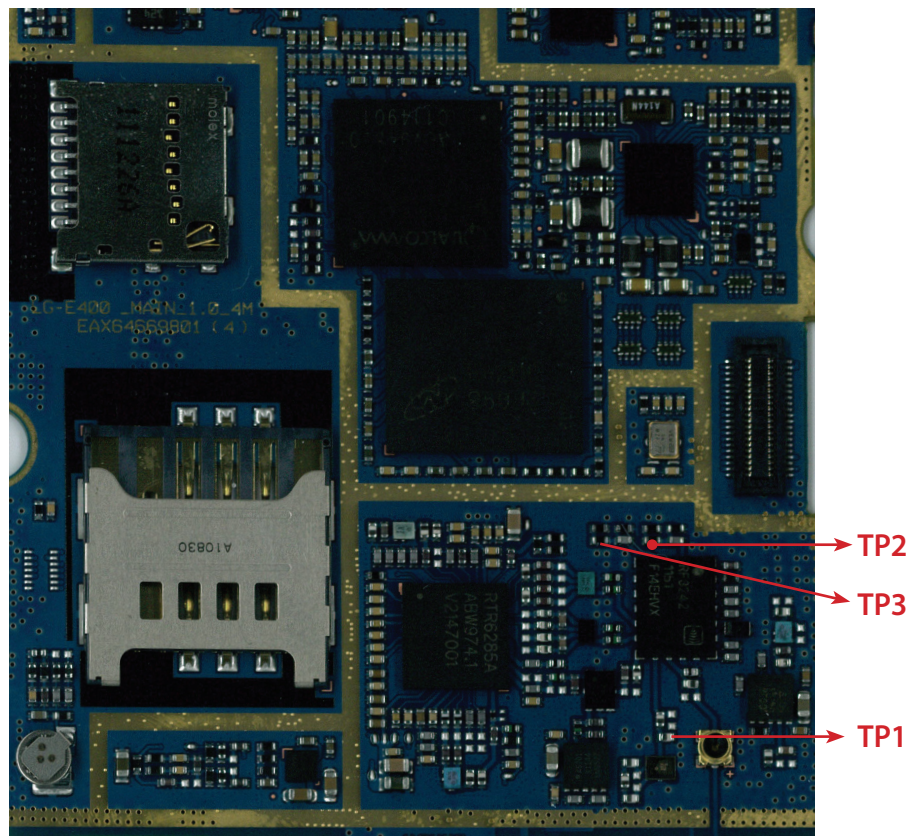
4.6.1 Checking TCXO Block

Refer to 4.3

4.6.2 Checking Tx module Block

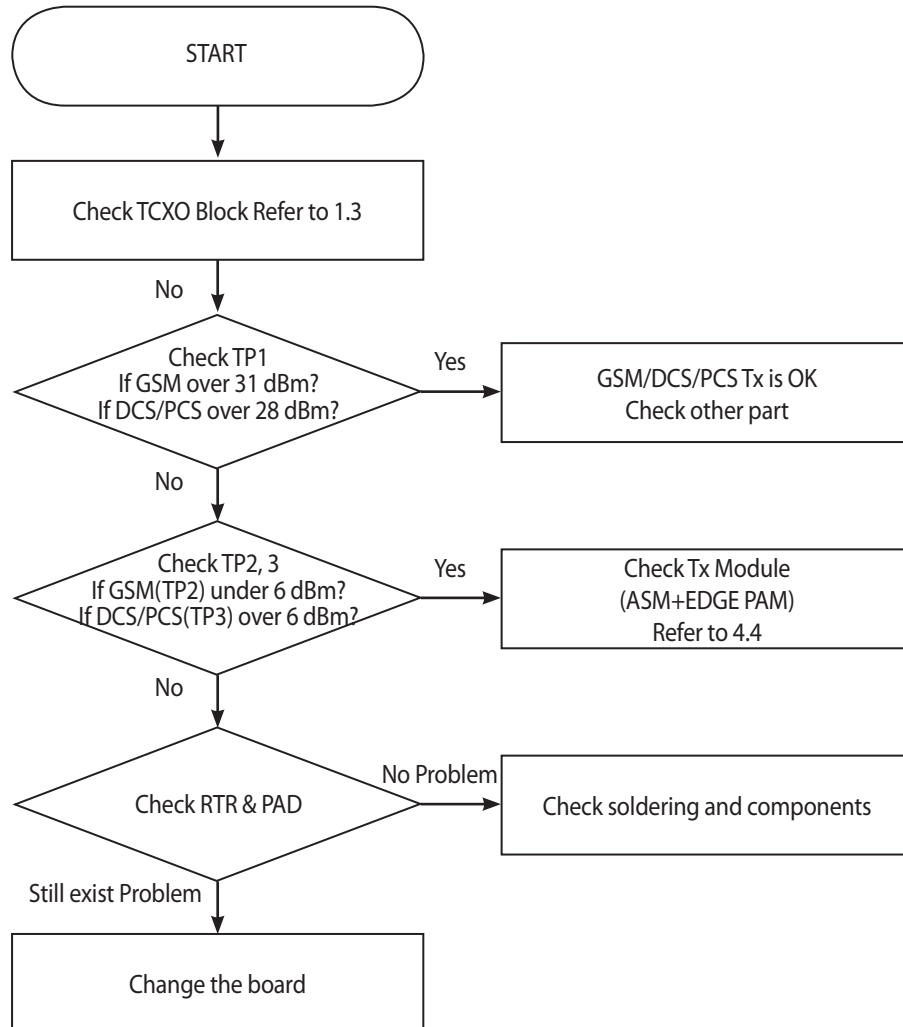
Refer to 4.4

4.6.3 Checking RF TX level

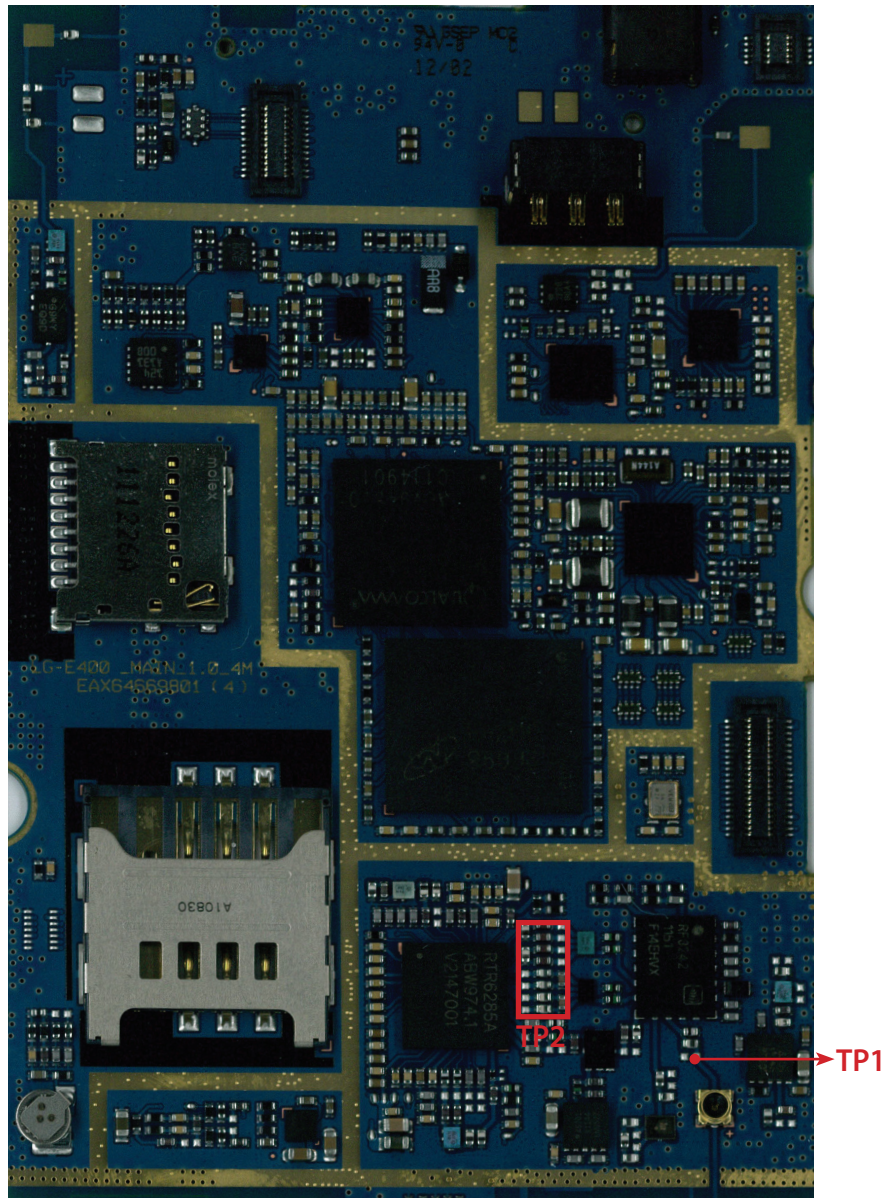




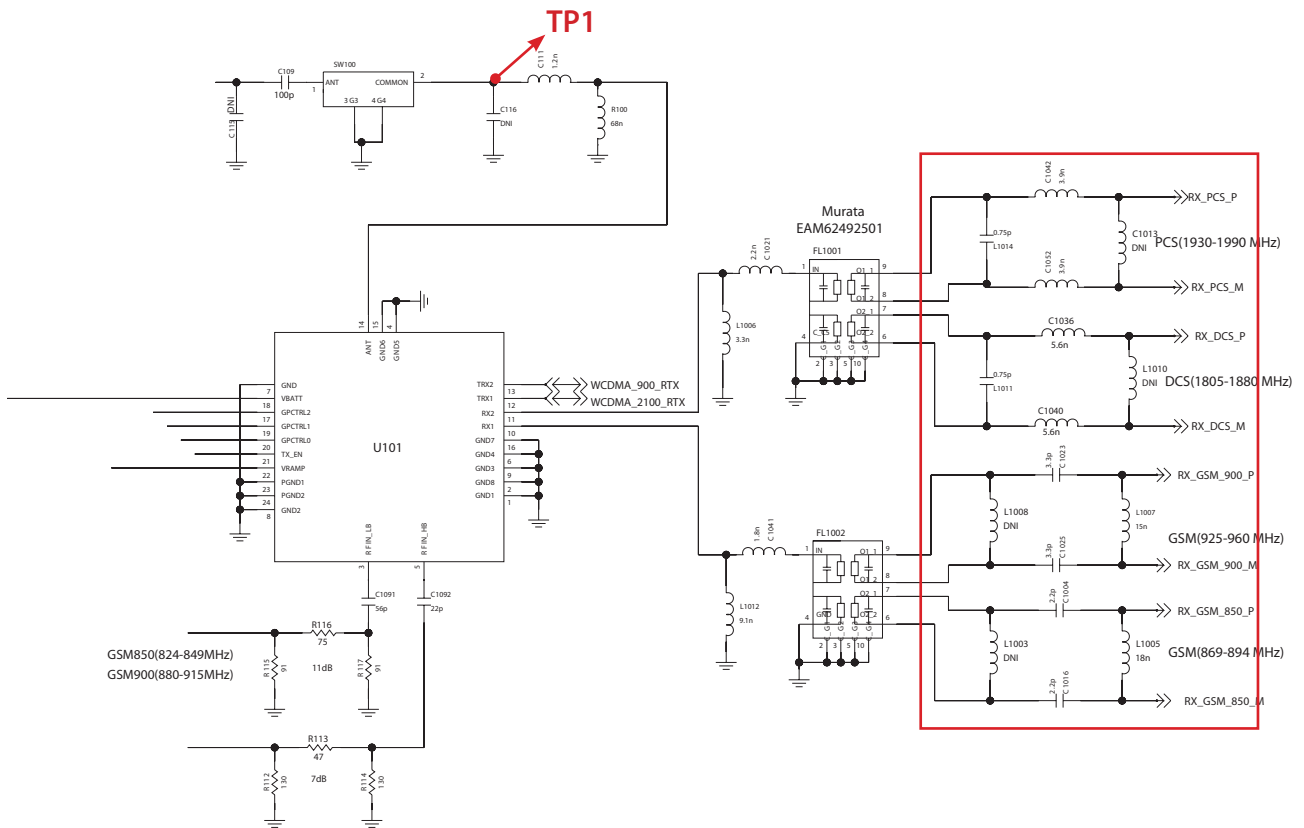
4. TROUBLE SHOOTING



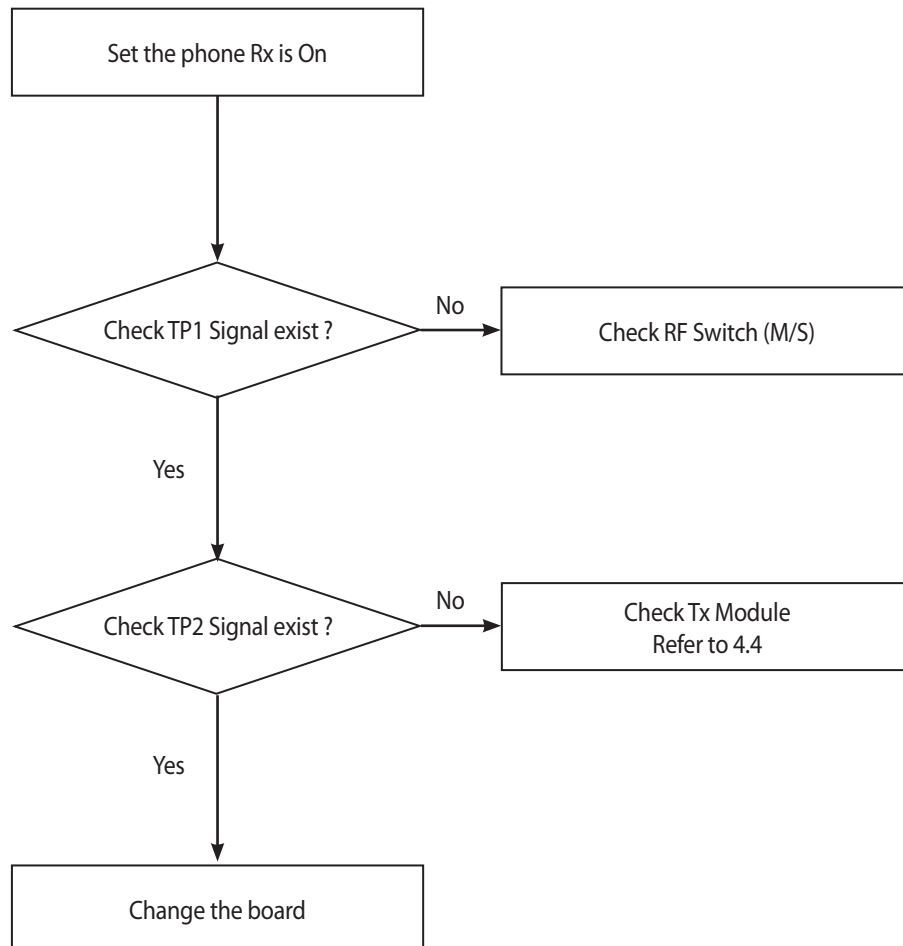
4.6.4 Checking RF Rx Block



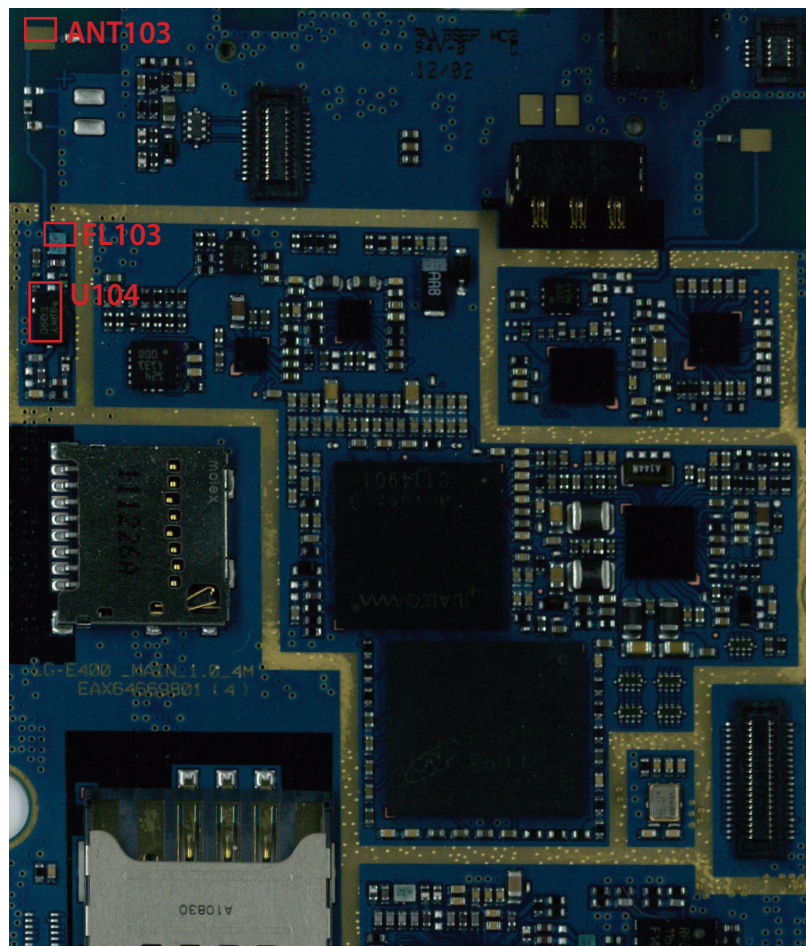
4. TROUBLE SHOOTING



Schematic of GSM/DCS/PCS Rx Block



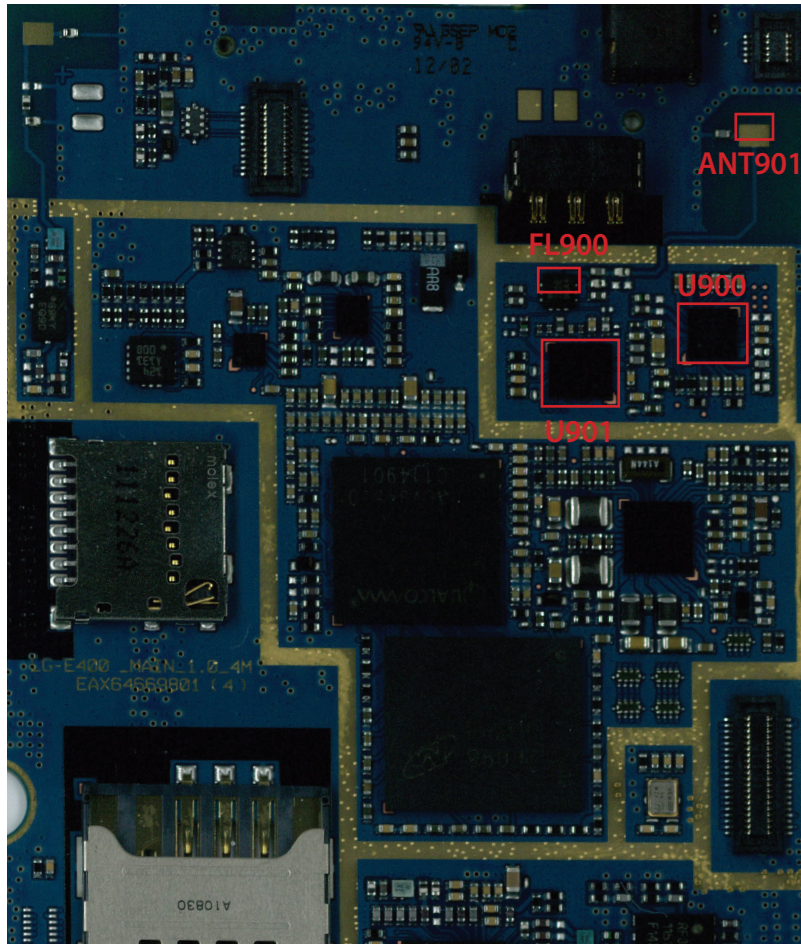
4.7 GPS/WIFI/BT RF Component



RF Component(GPS)

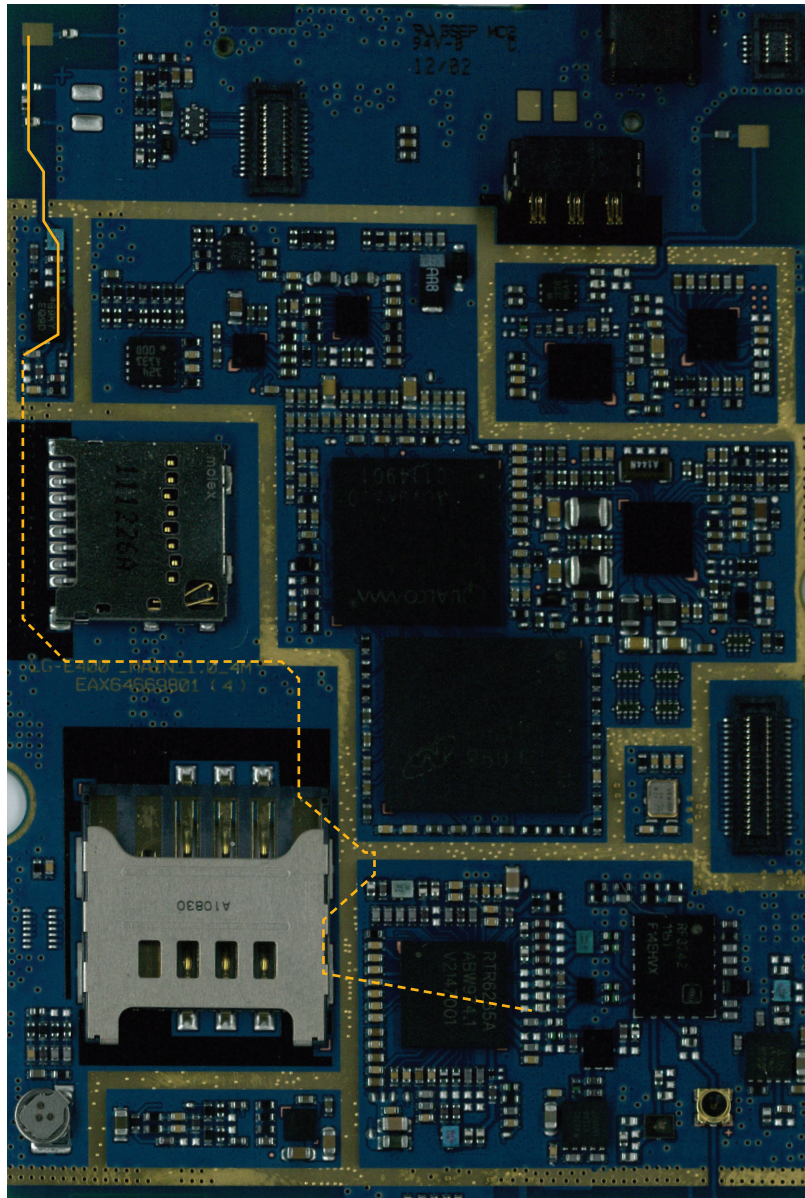
Reference	Description
ANT103	ANTENNA PAD connected to Carrier type antenna
FL103	GPS SAW FILTER
U104	GPS LNA

4. TROUBLE SHOOTING



Reference	Description
ANT901	ANTENNA PAD connected to Carrier type antenna
U900	BT module
U901	WiFi module
FL900	FEM

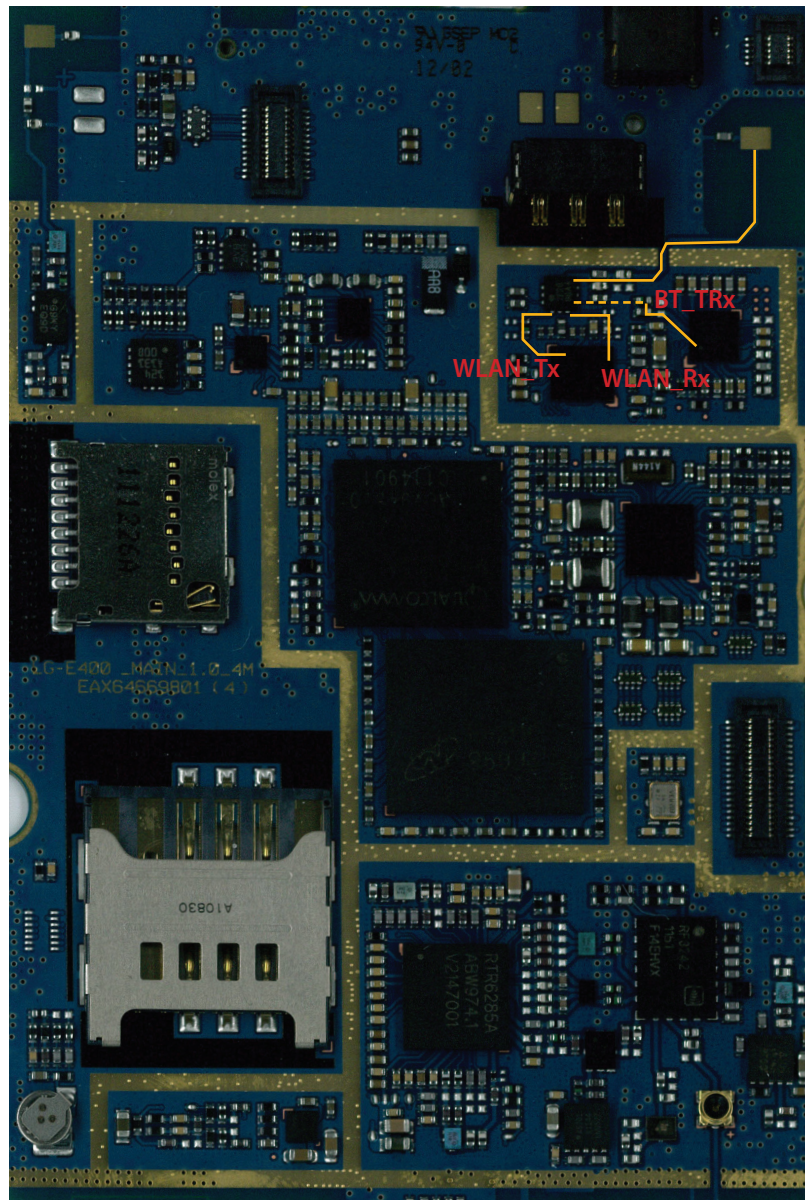
4.8 GPS/WIFI/BT SIGNAL PATH



GPS Signal PATH (main board bottom)

GPS Rx PATH

4. TROUBLE SHOOTING

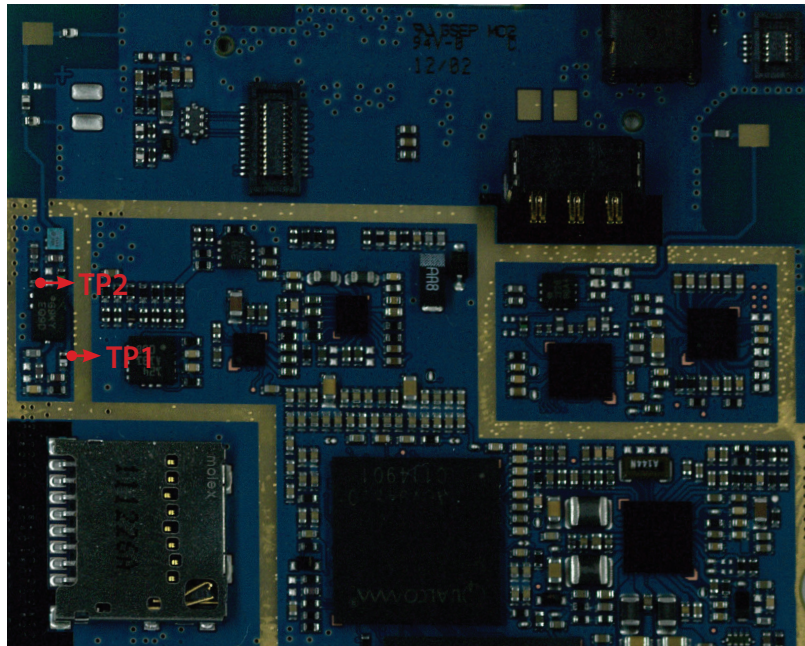


WiFi / BT Signal PATH

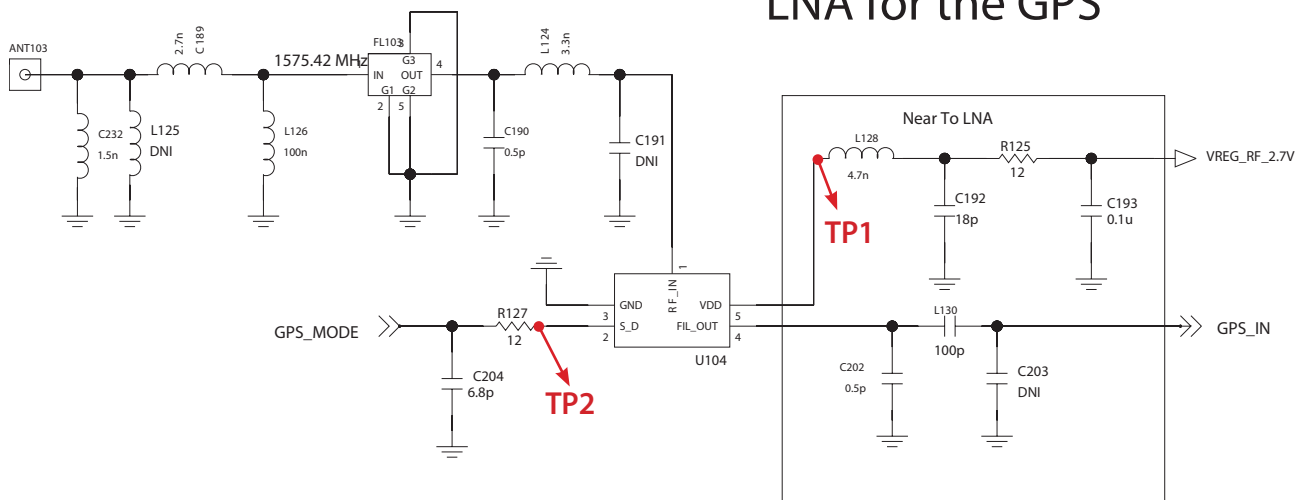
WiFi / BT Tx and Rx PATH

4.9 GPS/WIFI/BT Trouble shooting

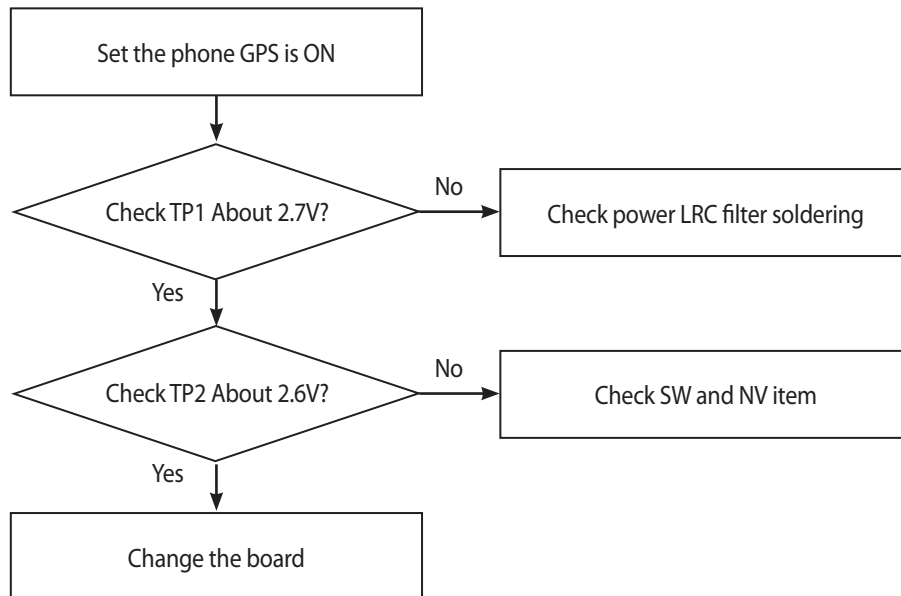
4.9.1 A-GPS Block



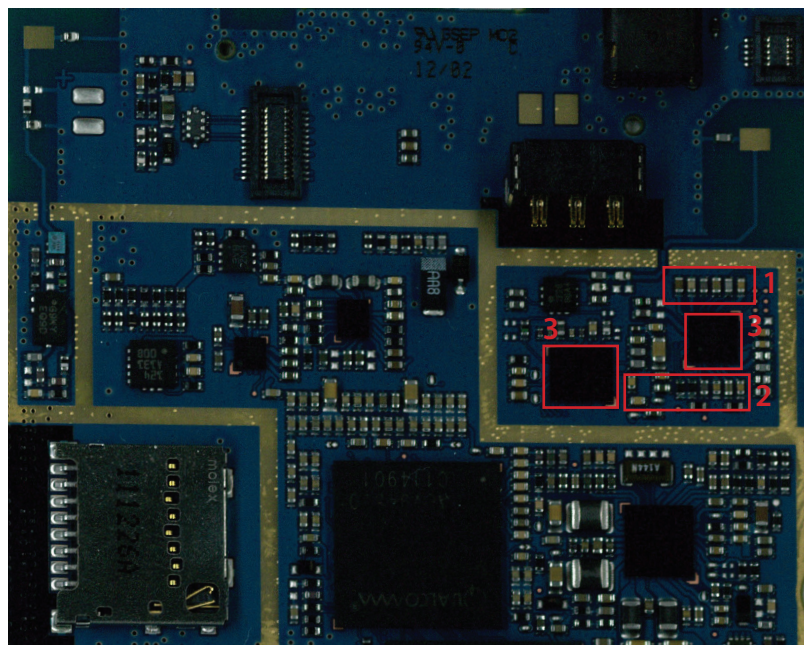
LNA for the GPS

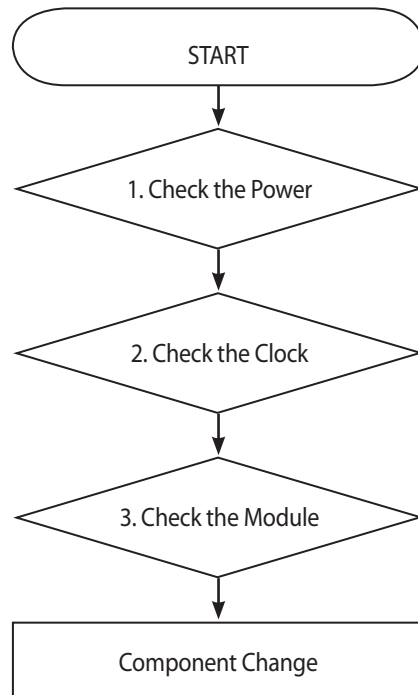


4. TROUBLE SHOOTING



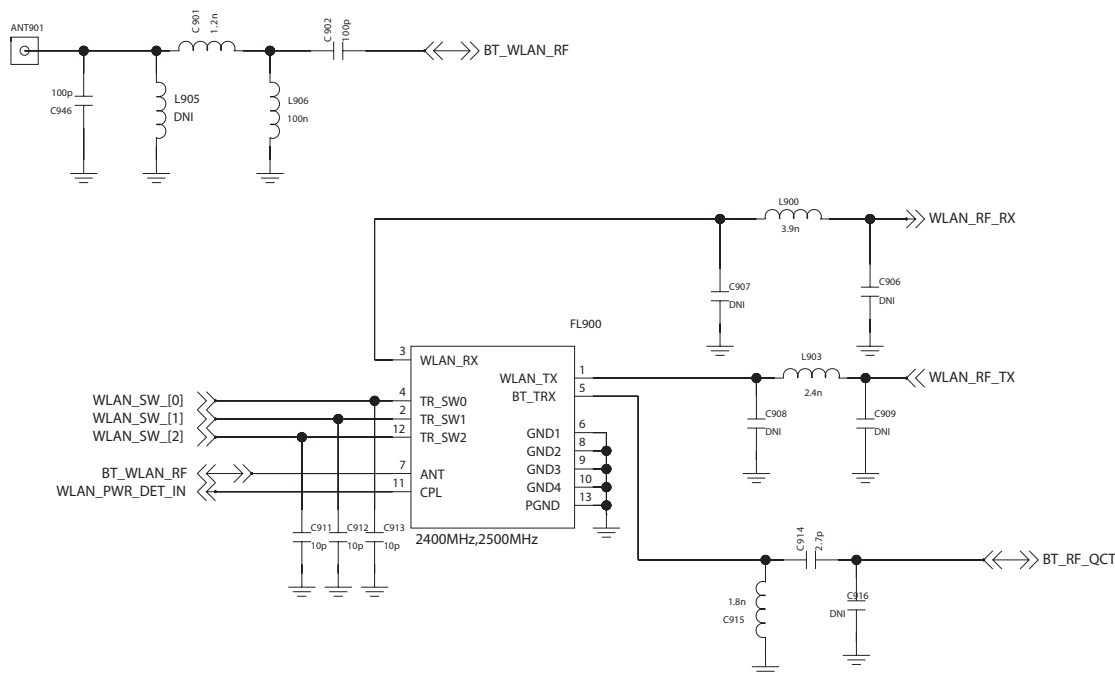
4.9.2 WLAN/BT/FM Block





Module part

BT/WI-FI FRONT-END

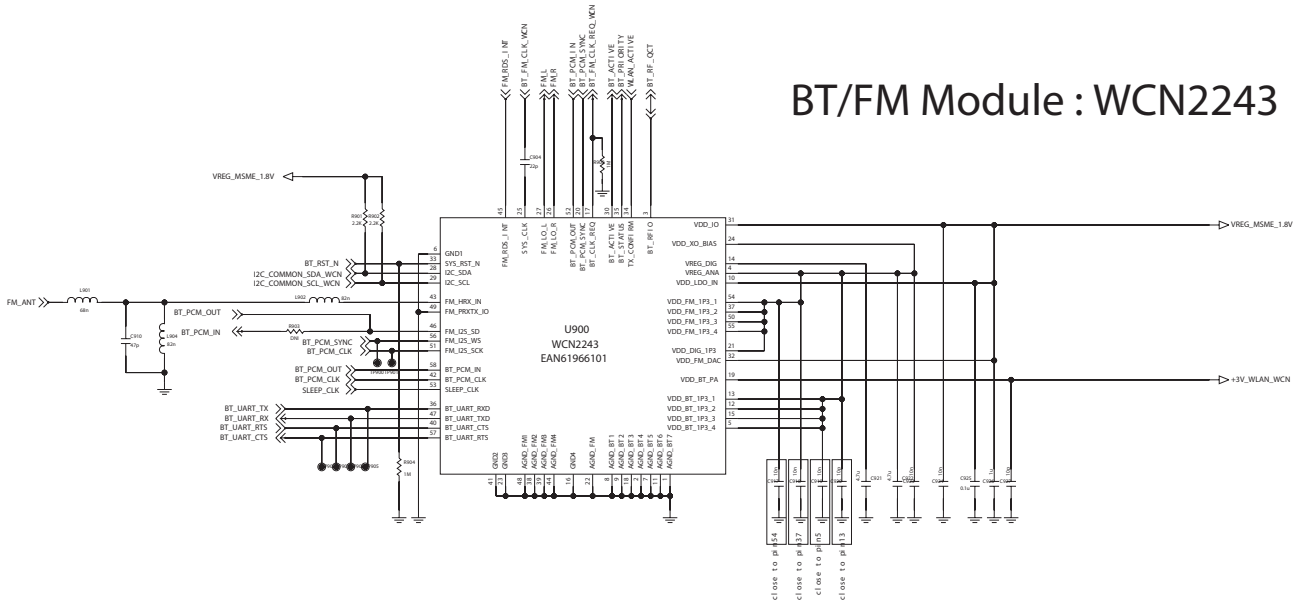


ANTENNA SWITCH MODULE LOGIC

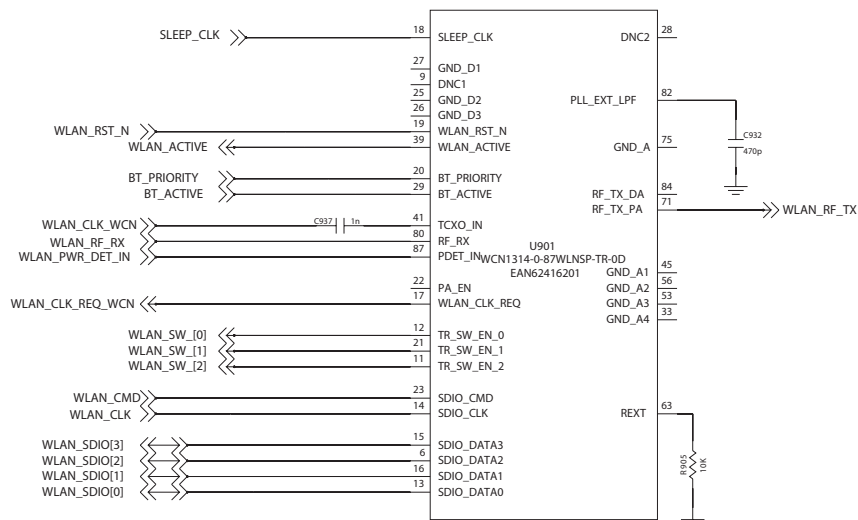
	SW0	SW1	SW2
WiFi RX-ANT	HIGH	LOW	LOW
WiFi TX-ANT	LOW	HIGH	LOW
BT-ANT	LOW	LOW	HIGH

4. TROUBLE SHOOTING

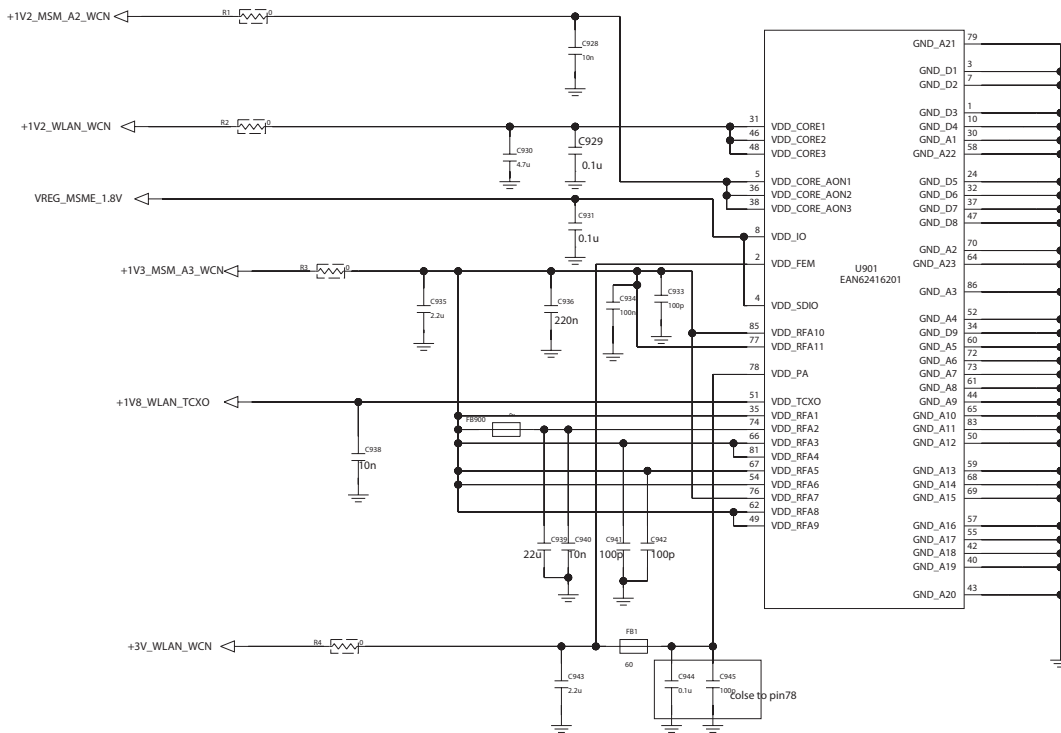
BT/FM Module : WCN2243



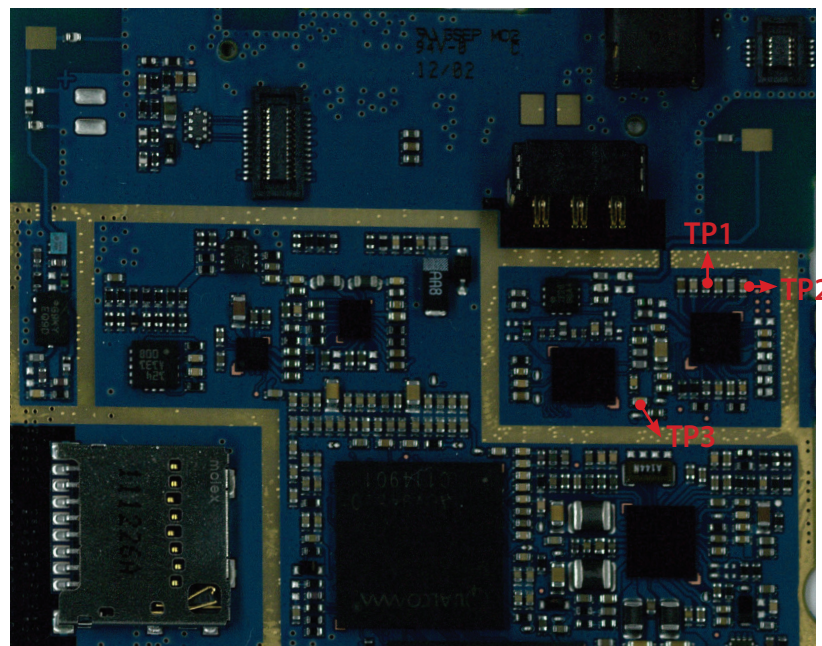
Wi-Fi : WCN1314



WiFi : WCN 1314



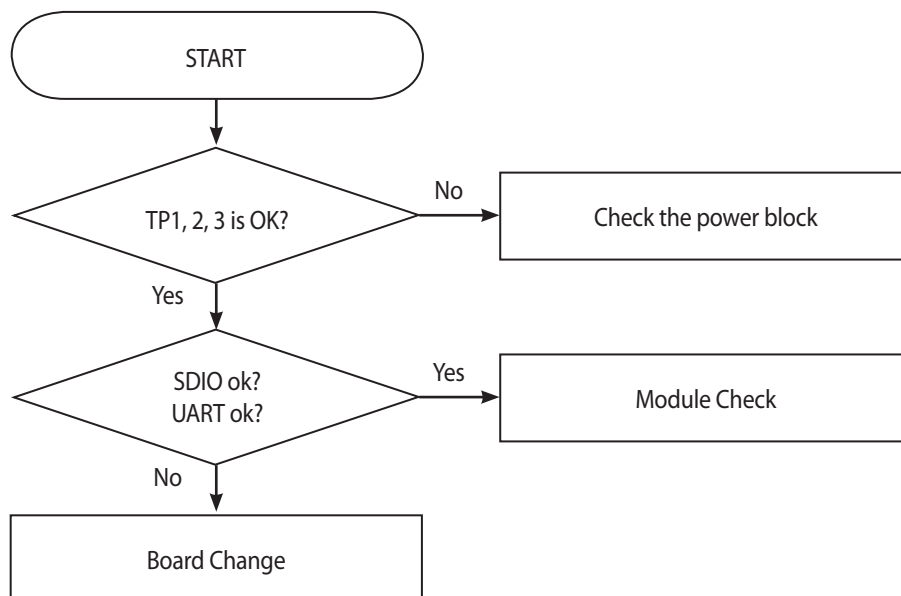
[Figure] Schematic of WiFi/BT module



4. TROUBLE SHOOTING

Test point Description

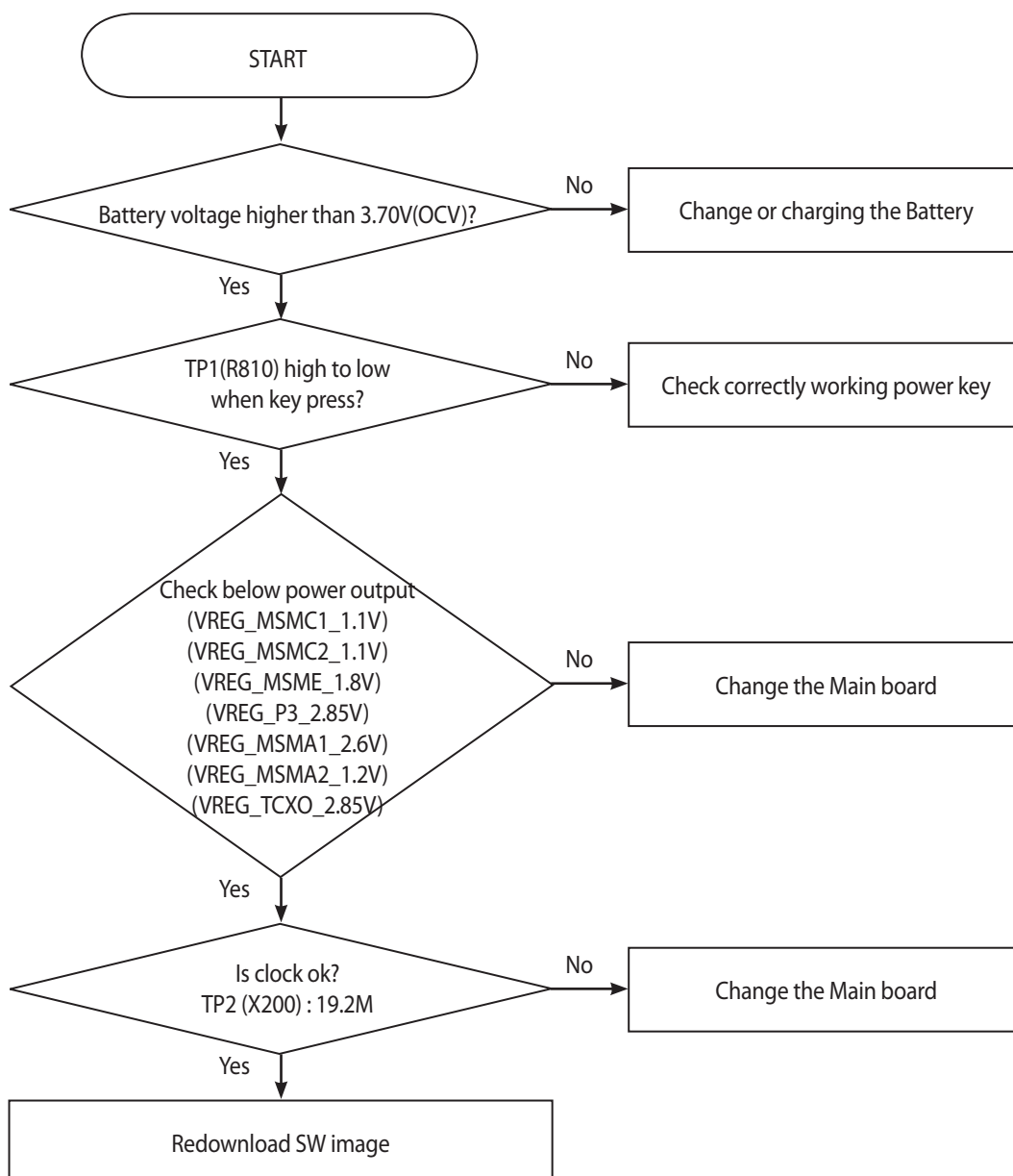
Test point	Net name	Description
TP1	'+3V_WLAN_WCN	Power for BT/WiFi BB core and WiFi power Amp. (V Batt)
TP2	VREG_MSME_1.8V	Power for BT power Amp. (1.8V)
TP3	VREG_MSME_1.8V	Power for host interface (1.8V)



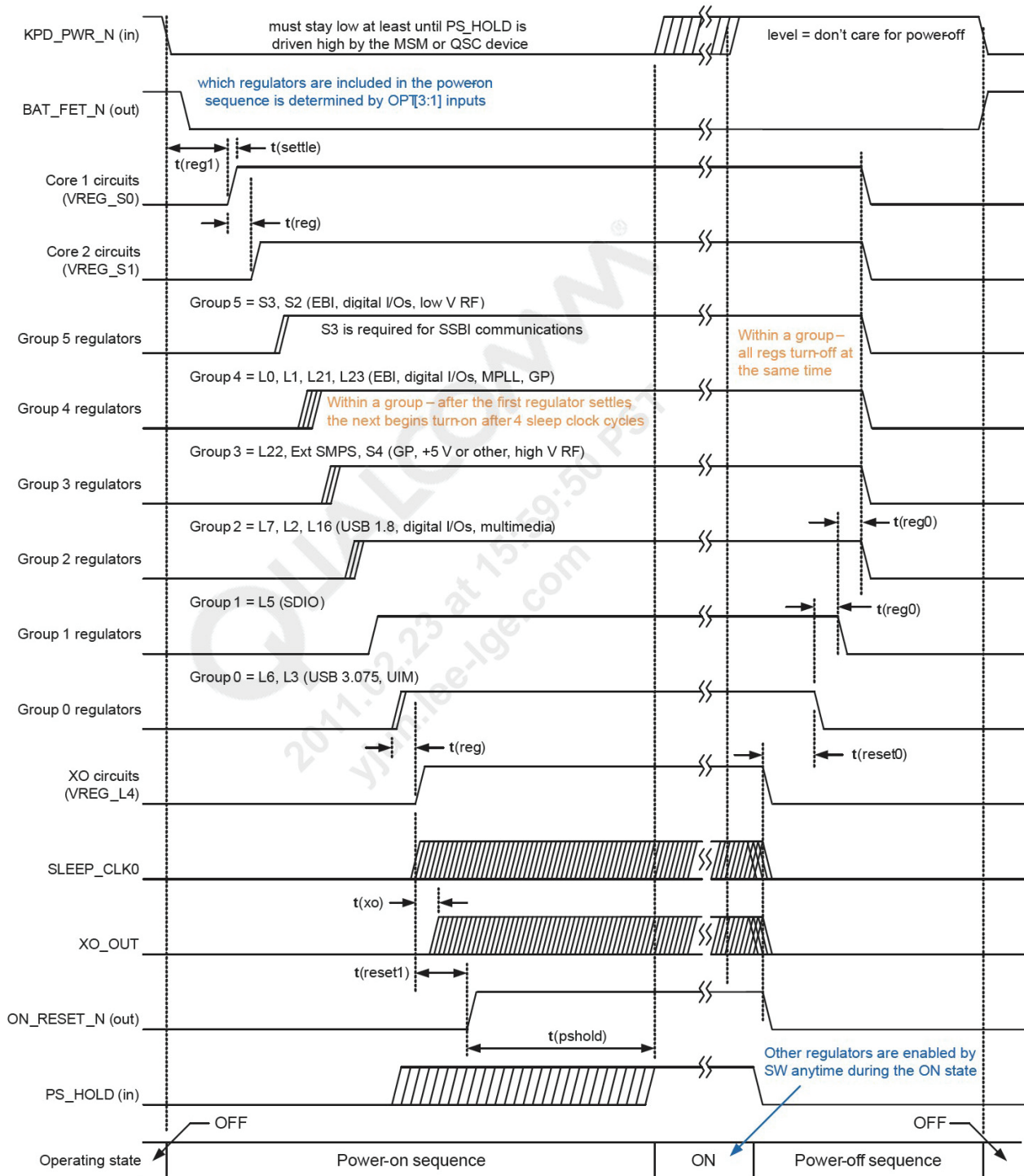
4.10 Power ON Trouble Shooting

Power On sequence of E400 is :

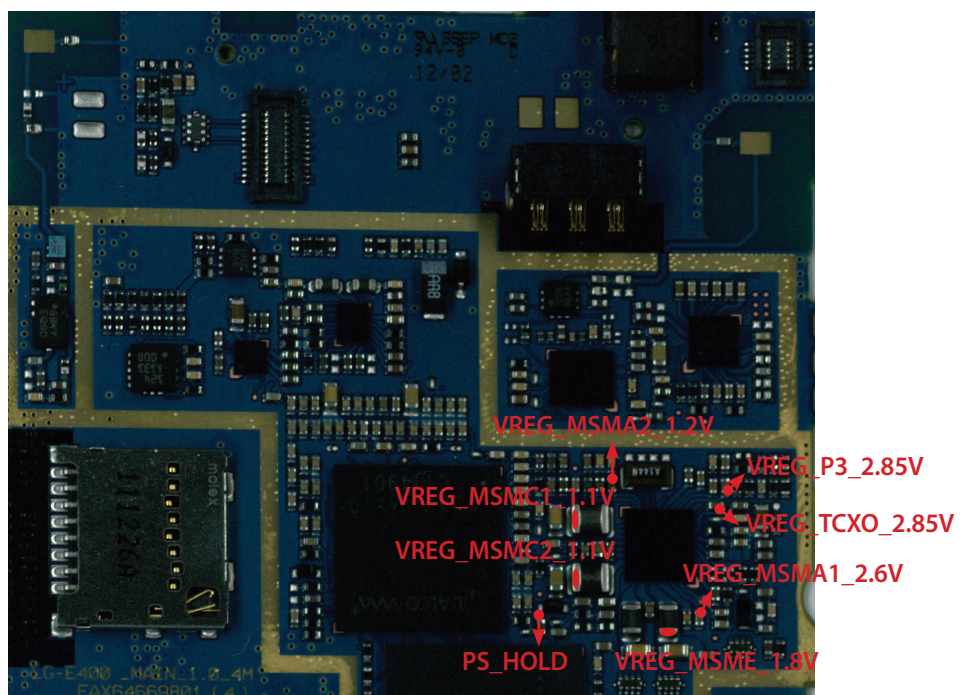
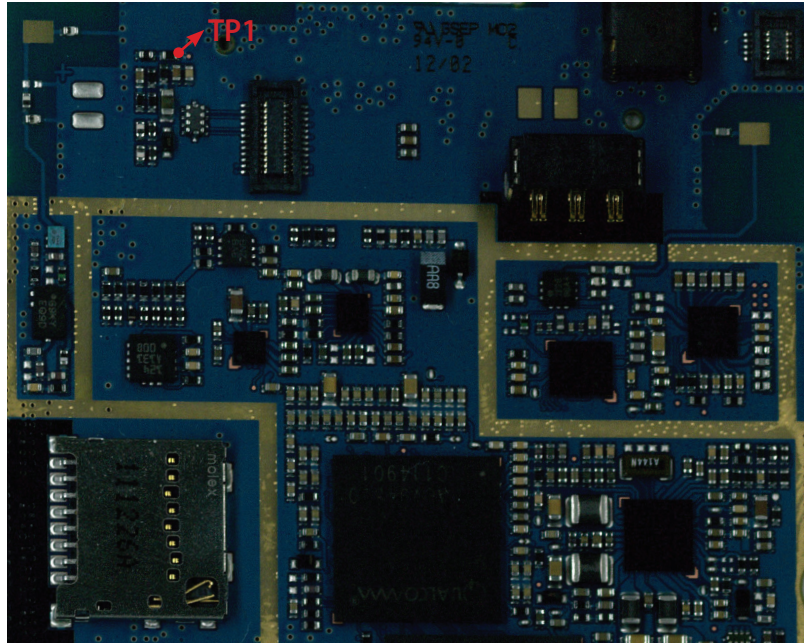
Power key press → KPD_PWR_N go to low → PM8029 Power Up → VREG_MSMC1_1.1V (L400), VREG_MSMC2_1.1V (L401), VREG_MSME_1.8V (L402), VREG_P3_2.85V (C453), VREG_MSMA1_2.6V (C448), VREG_MSMA2_1.2V (C444) VREG_TCXO_2.85V (C449) power ON → Phone booting and PS_HOLD(D401) go to High



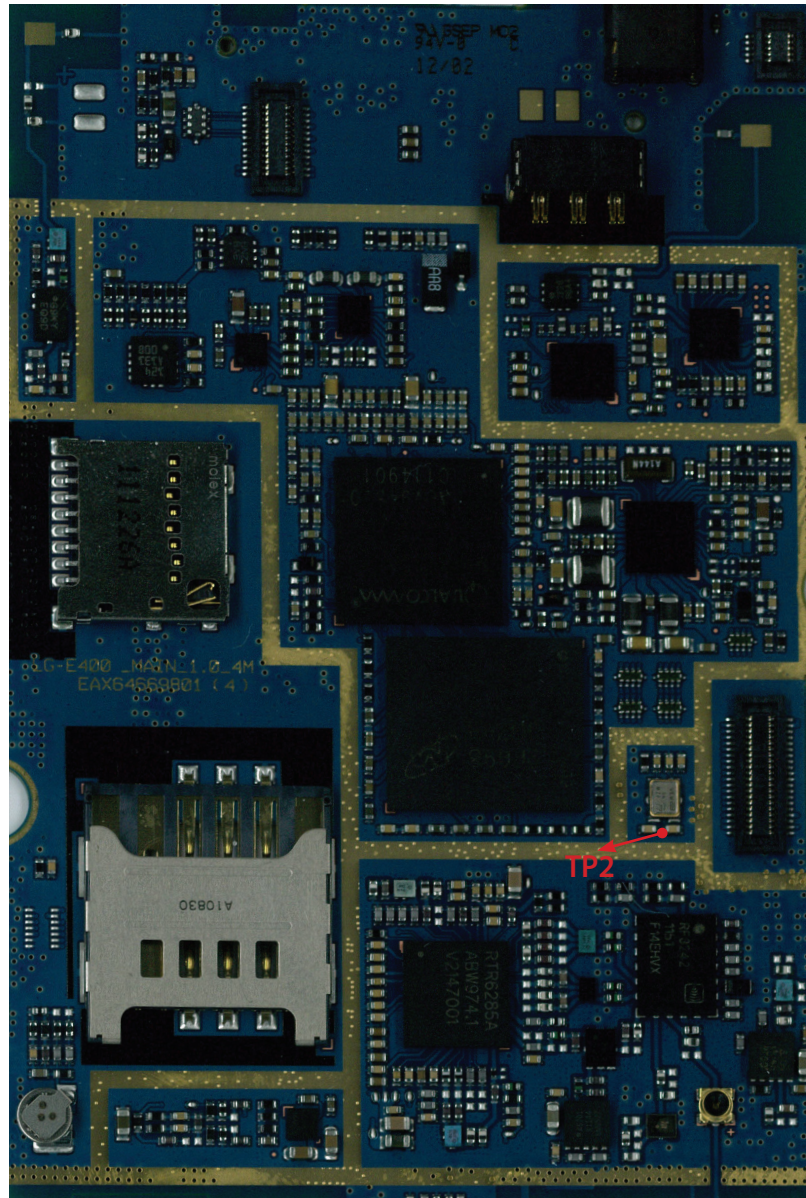
4. TROUBLE SHOOTING



4. TROUBLE SHOOTING

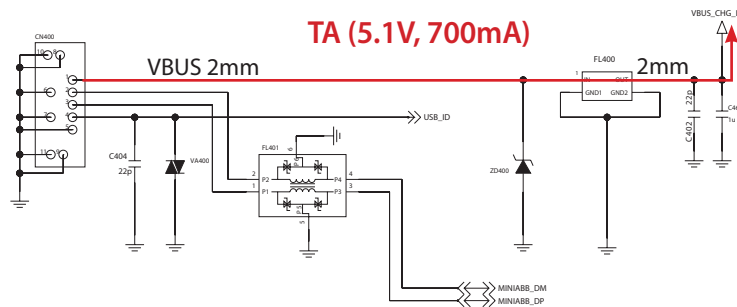


4. TROUBLE SHOOTING

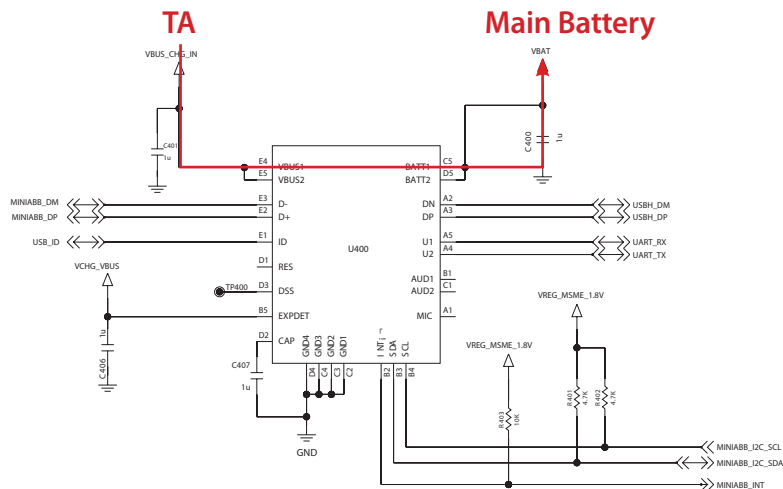


4.11 Charging Trouble Shooting

u-USB Connector



Mini ABB_NS



1. Charging Procedure

- Connect TA or u-USB Cable
- Control the charging current by LP8727-B IC
- Charging current flows into the battery

2. Check Point

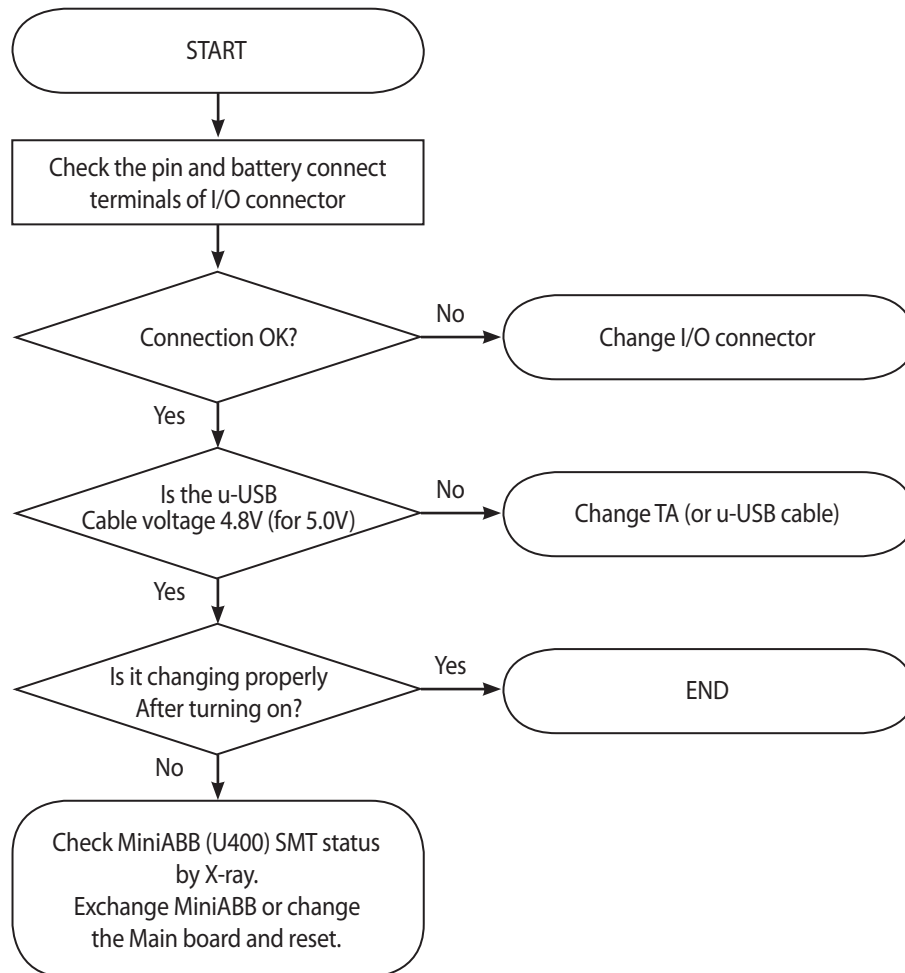
- Connection of TA or USB Cable
- Charging IC (LP8727-B)
- Battery

3. Troubleshooting Setup

- Connect TA and battery to the phone

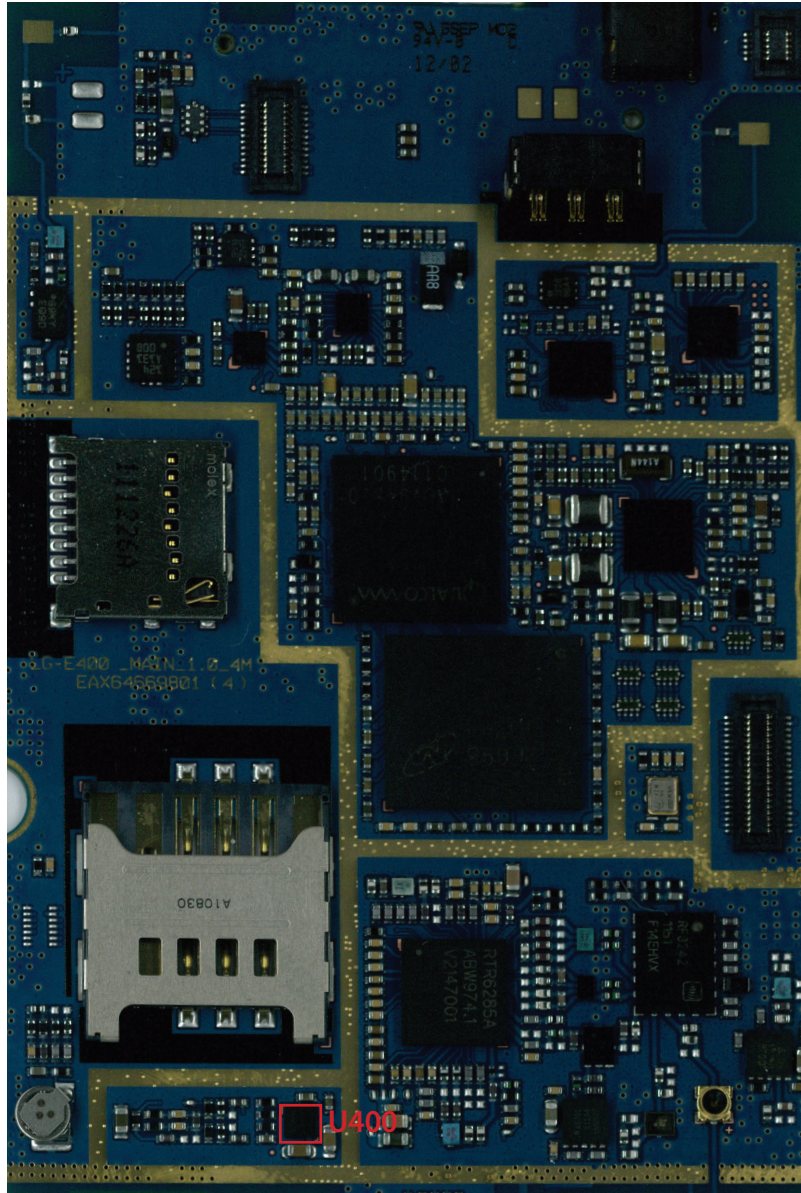
4. Troubleshooting Procedure

- Check the charger (TA or USB Cable)
- Check the OVP Circuit
- Check the Charging IC
- Check the battery



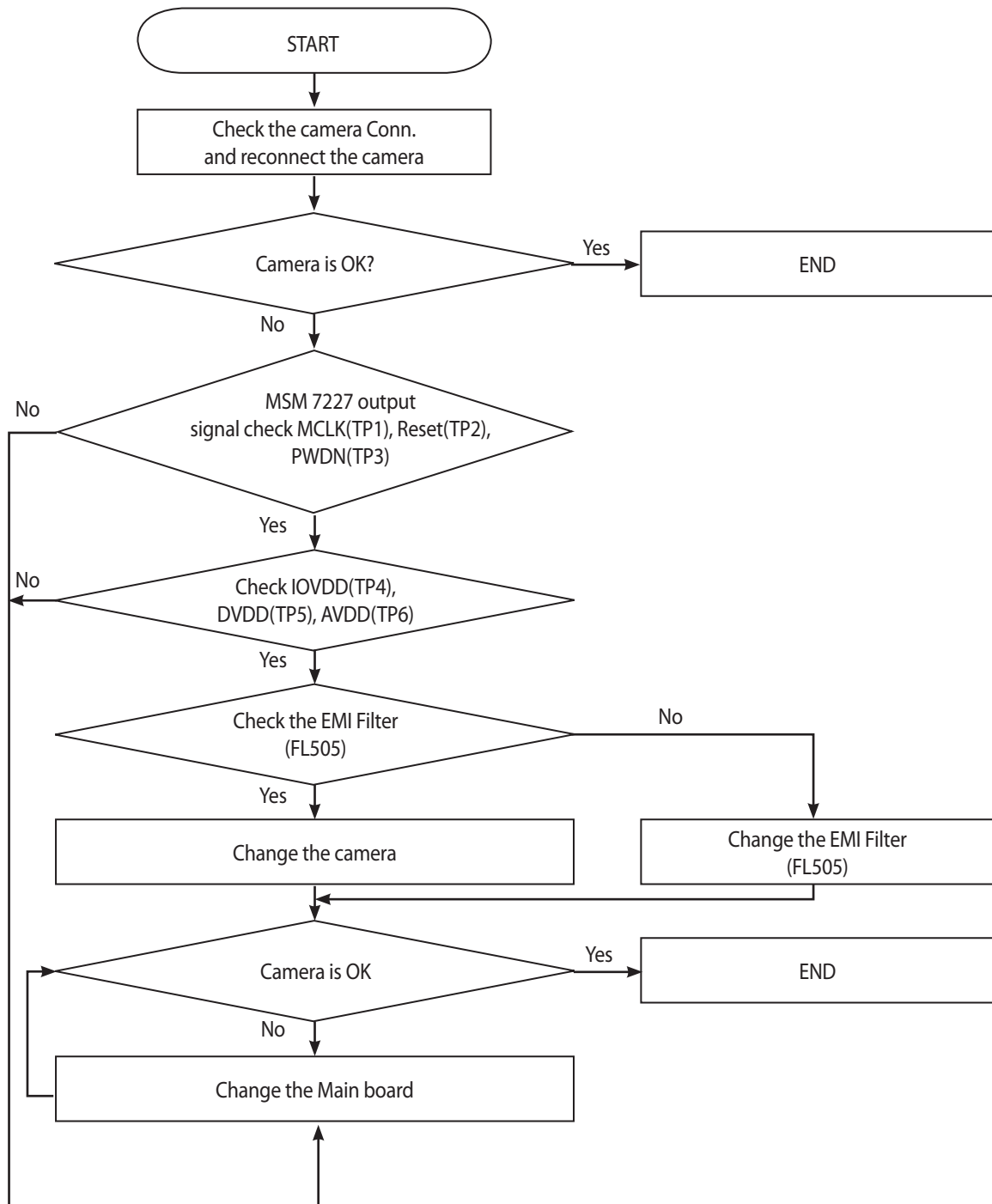
Charger Troubleshoot Flow

4. TROUBLE SHOOTING

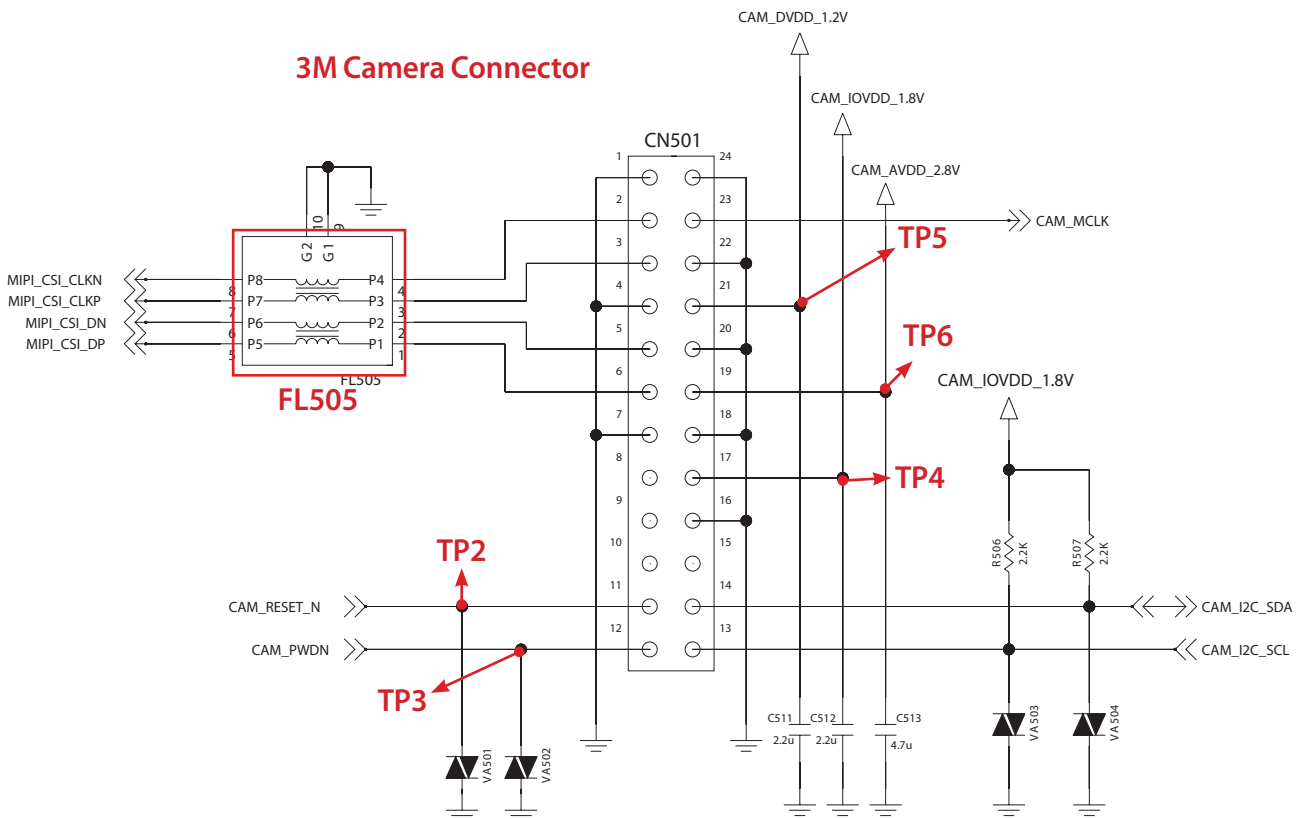
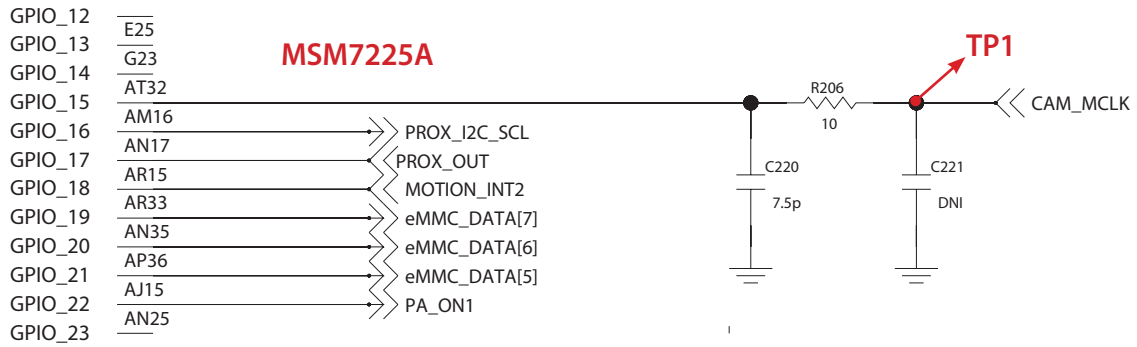


4.12 3MFF Camera Trouble Shooting

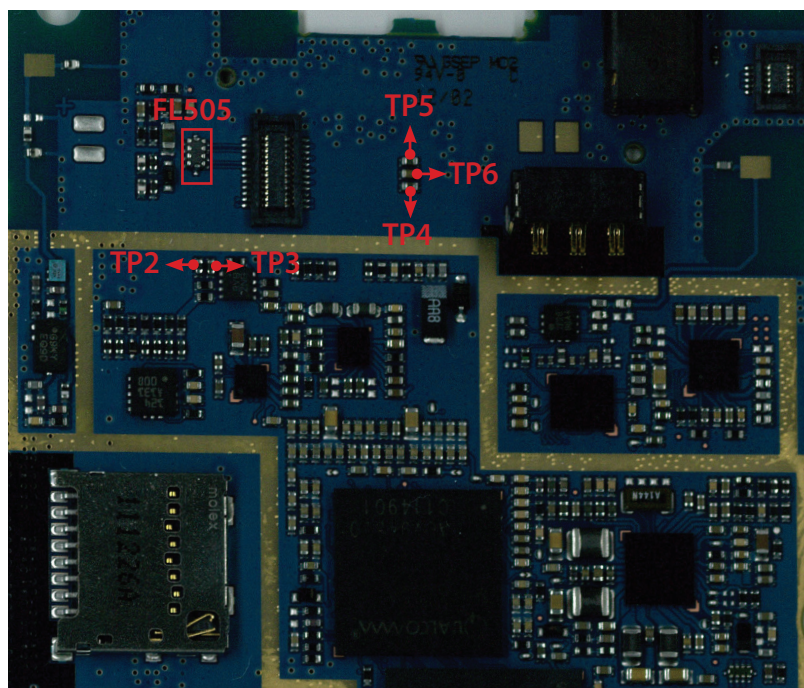
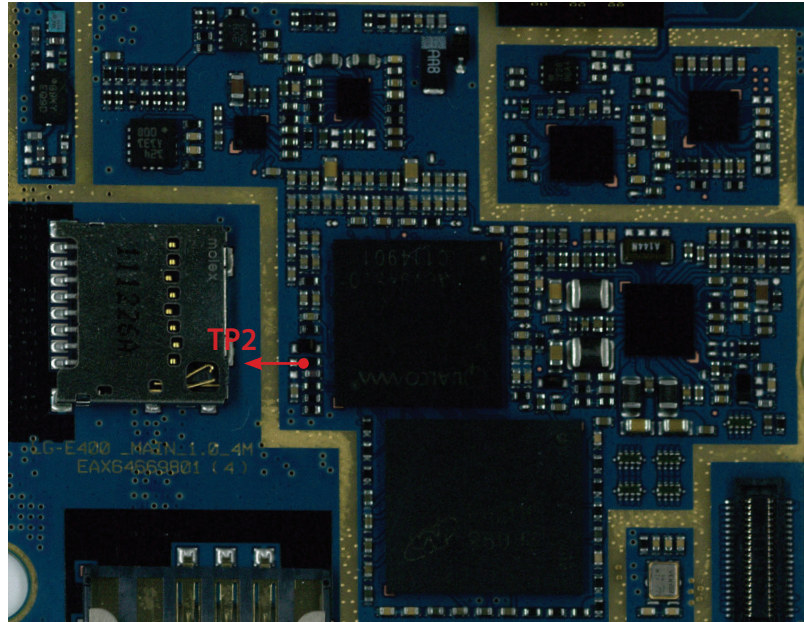
3M camera control signals are generated by MSM7225A.



4. TROUBLE SHOOTING

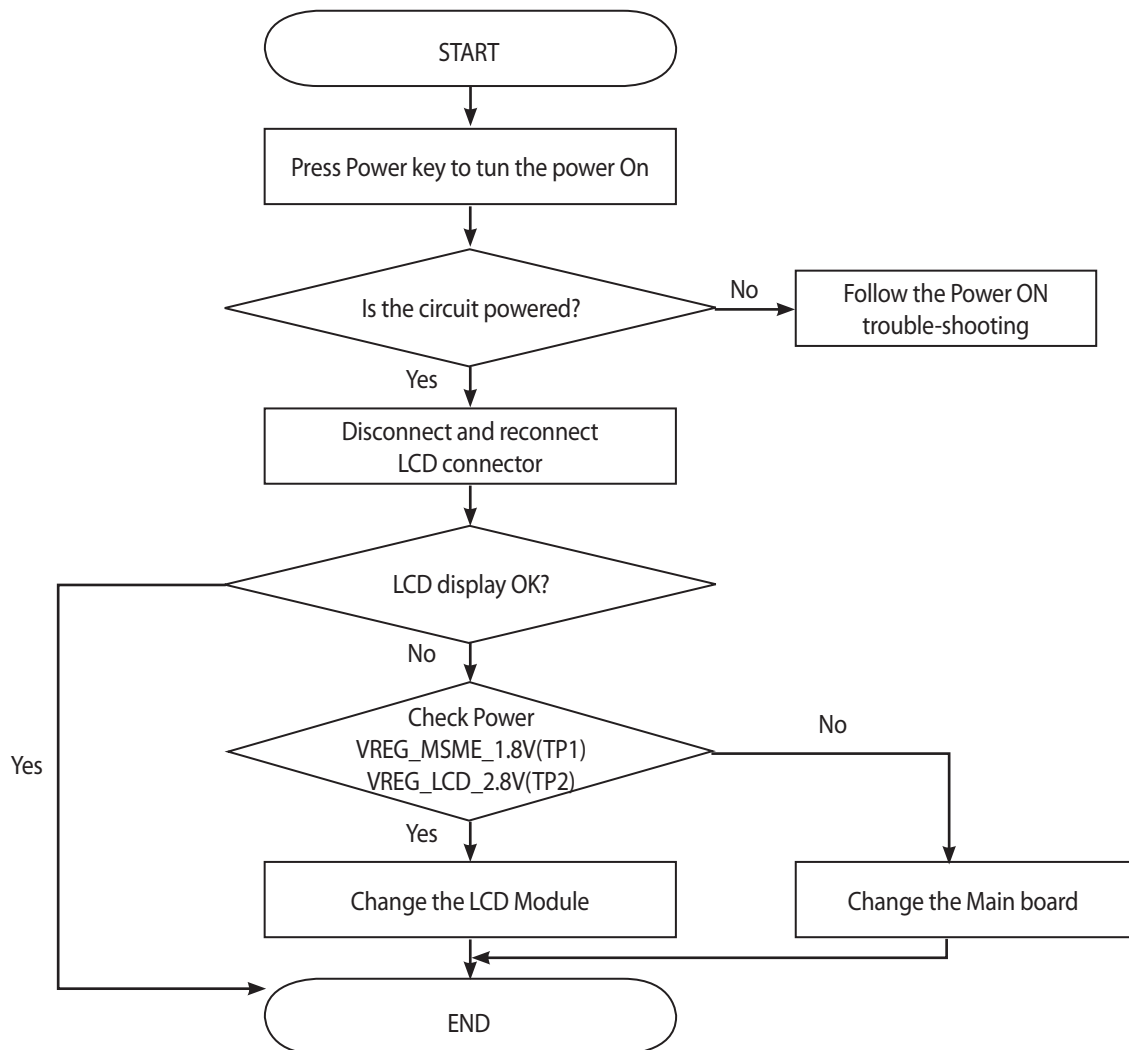


4. TROUBLE SHOOTING

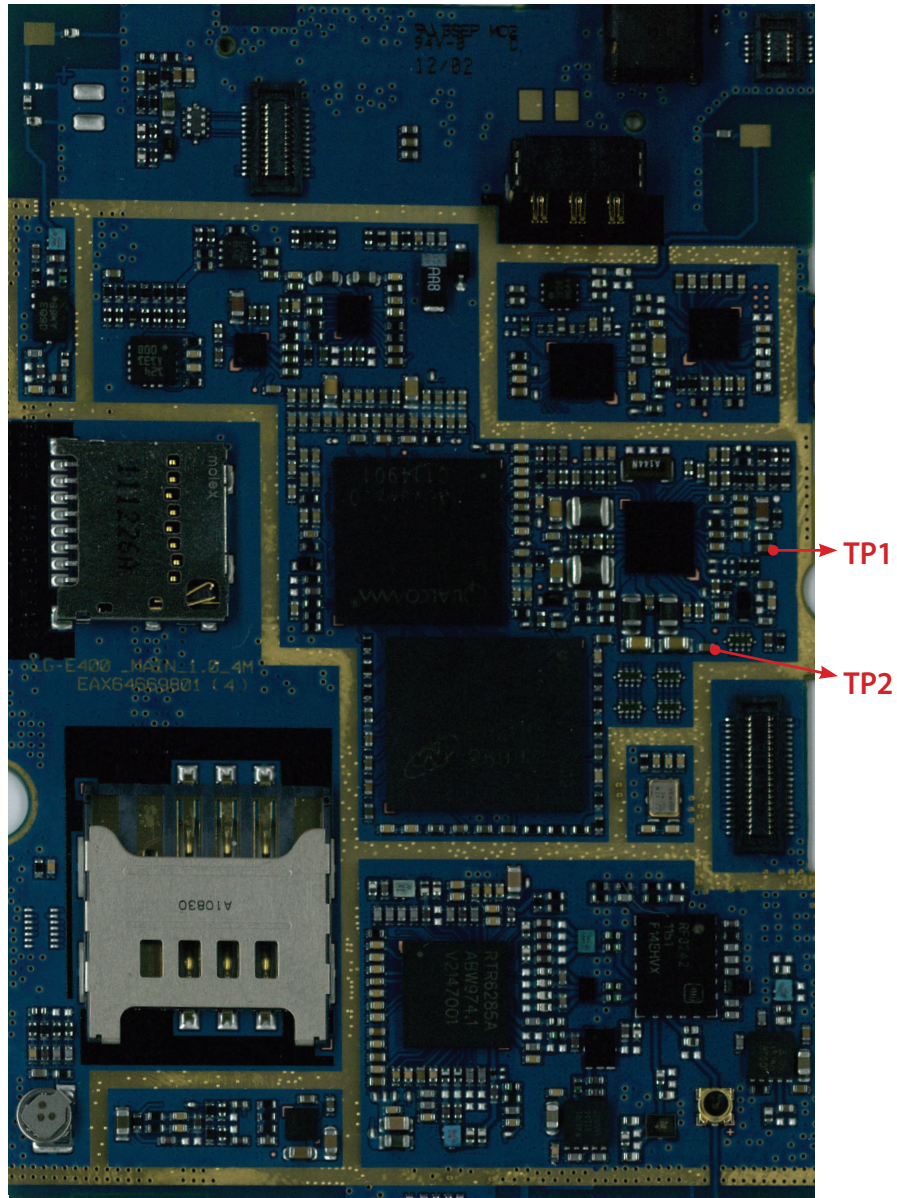


4.13 Main LCD trouble

Main LCD control signals are generated by MSM7225A. Those signal's path are : MSM7225A → LCD Module



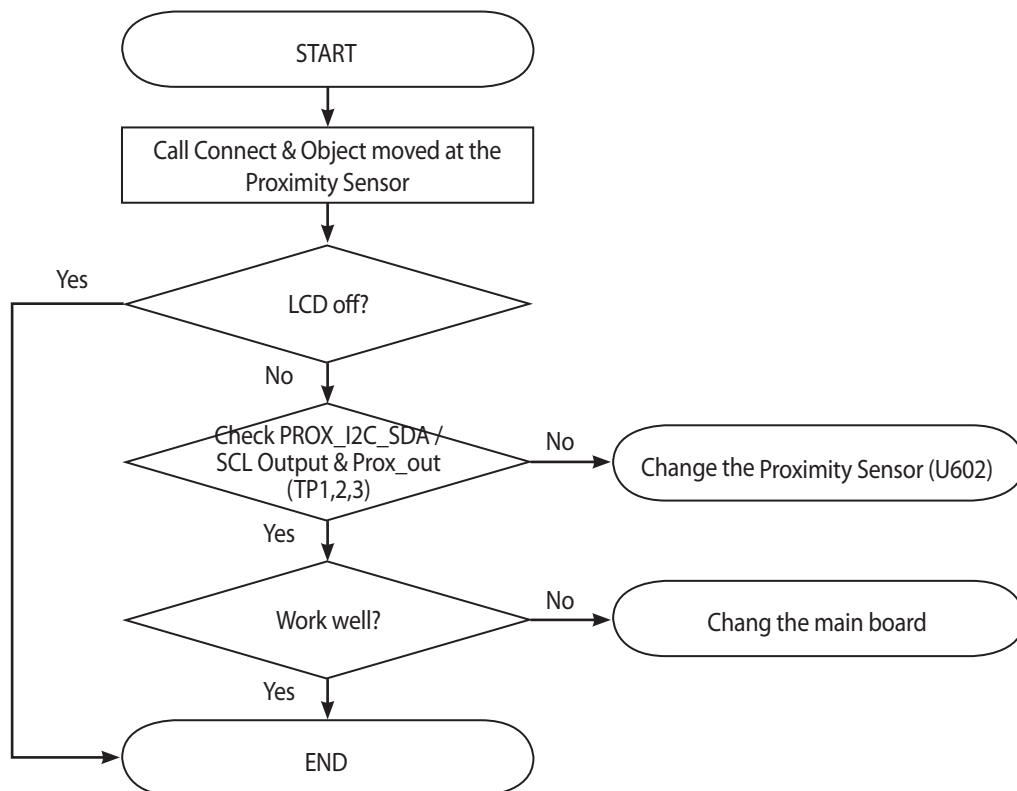
4. TROUBLE SHOOTING



4.14 Proximity Sensor on/off Trouble Shooting

Proximity Sensor is worked as below :

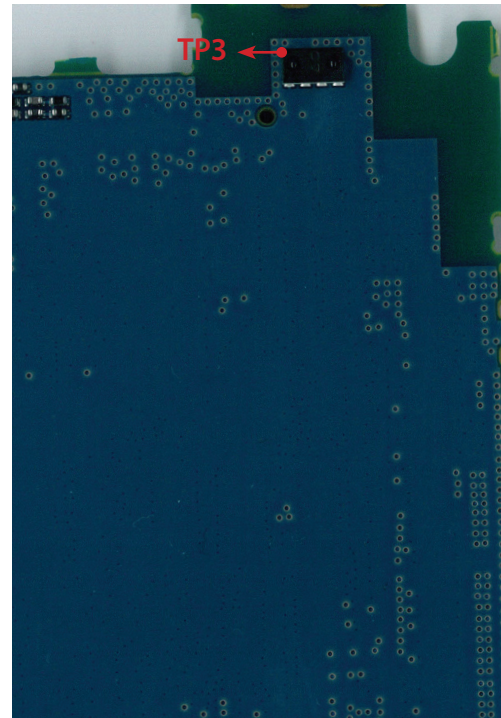
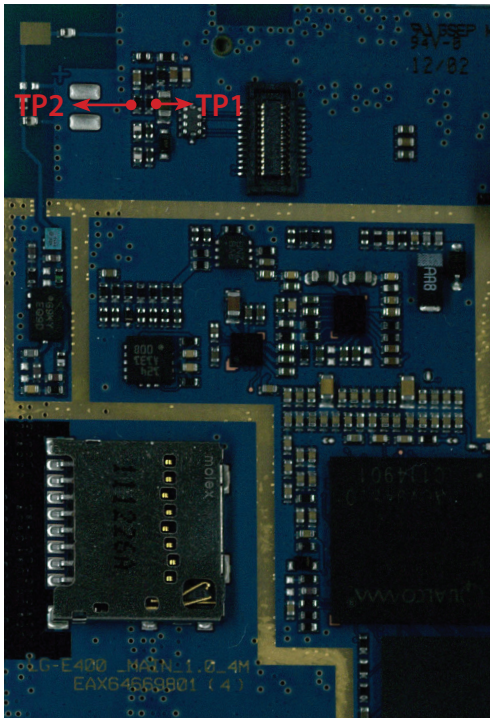
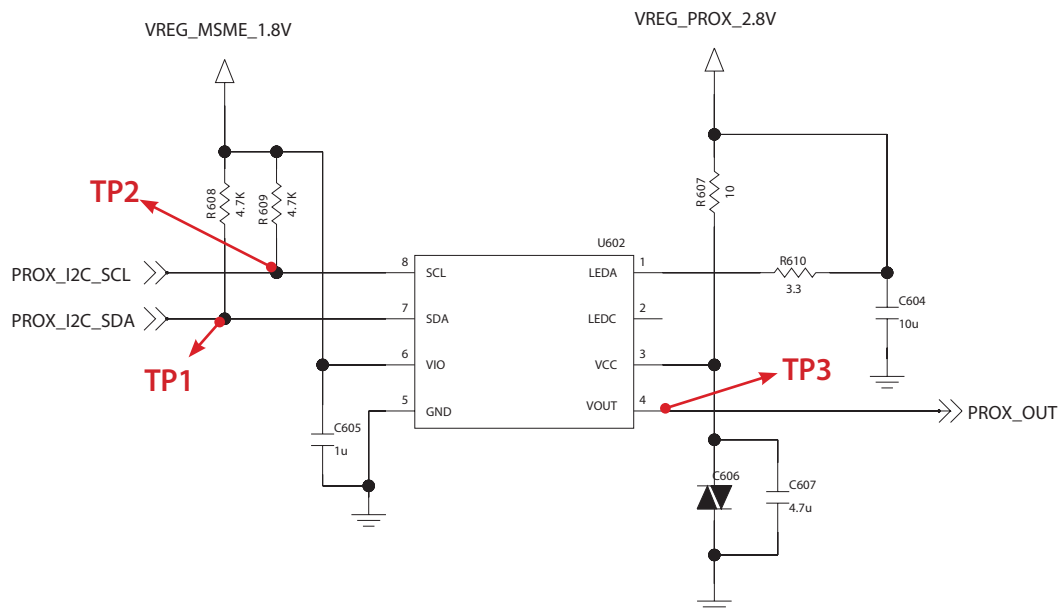
Call connected → Object moved at the sensor → Control the screen's on/off operation automatically



Measurement

VREG_MSME_1.8V
 VREG_PROX_2.6V
 PROX_OUT
 PROX_I2C_SCL / SDA

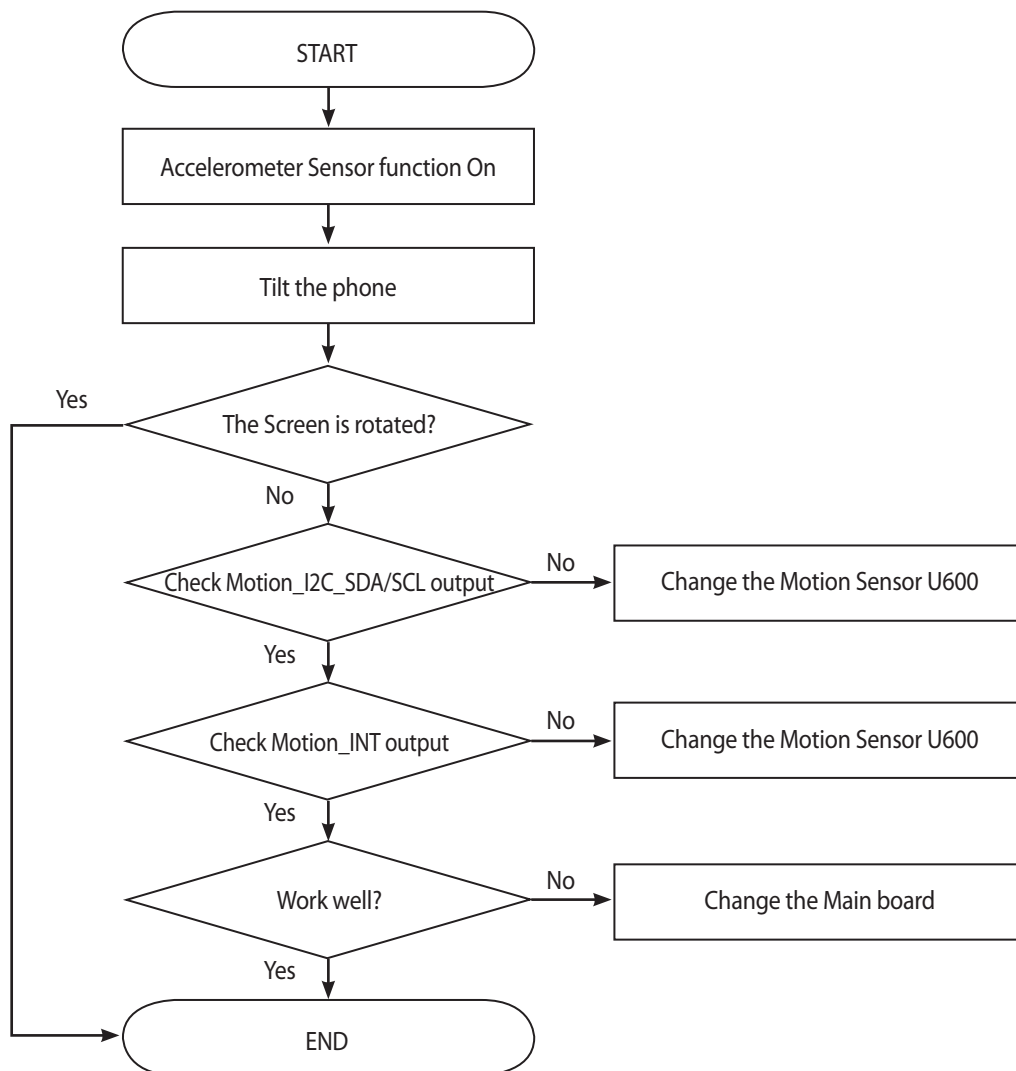
4. TROUBLE SHOOTING



4.15 Motion Sensor on/off Trouble Shooting

Motion Sensor is worked as below :

Accelerometer Sensor function On → Tilt the phone (90°) → The screen is had rotated automatic



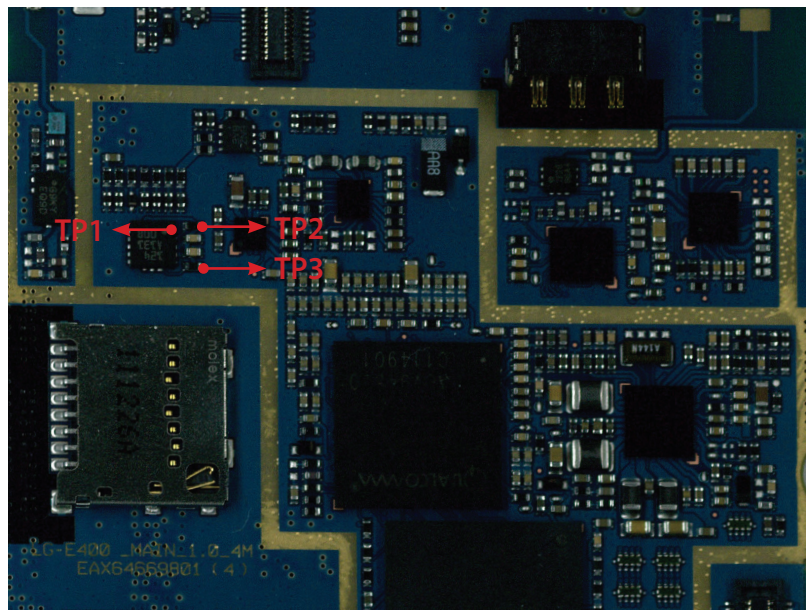
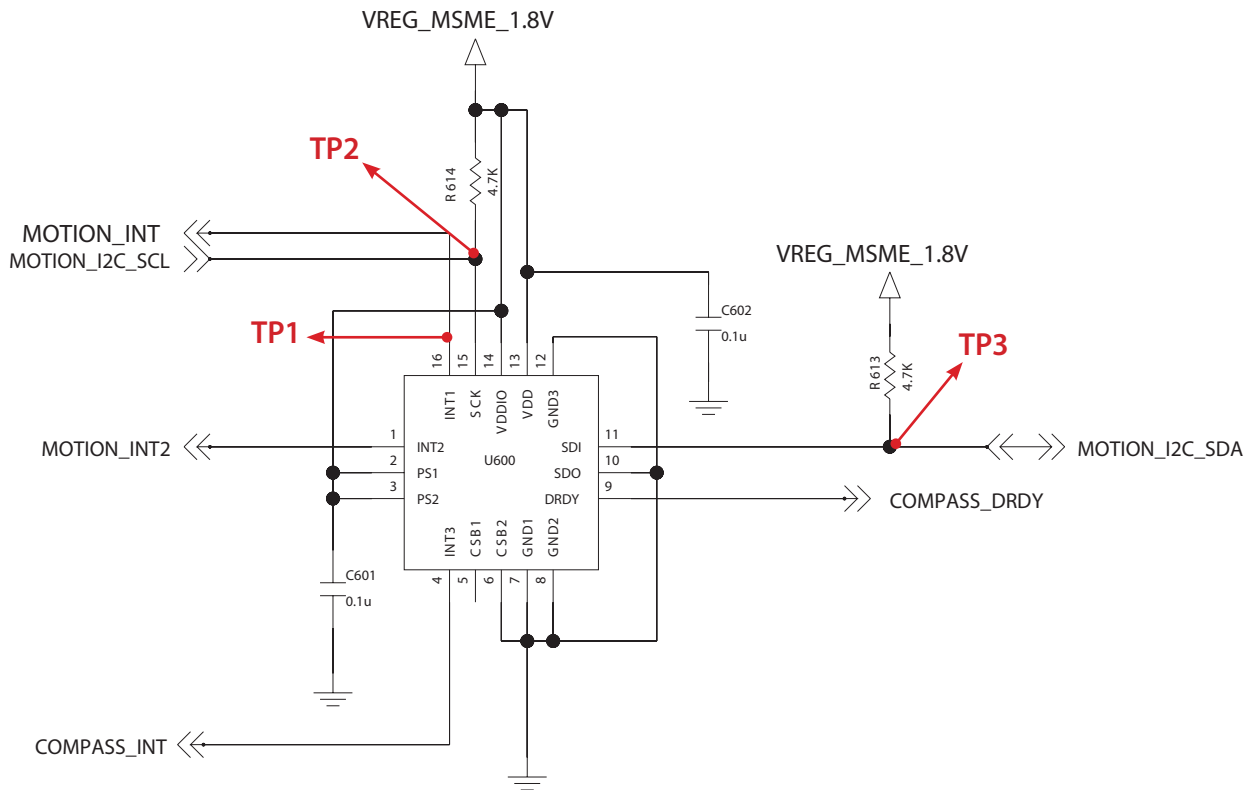
Measurement

VREG_MSME_1.8V

MOTION_INT

MOTION_I2C_SDA / SCL

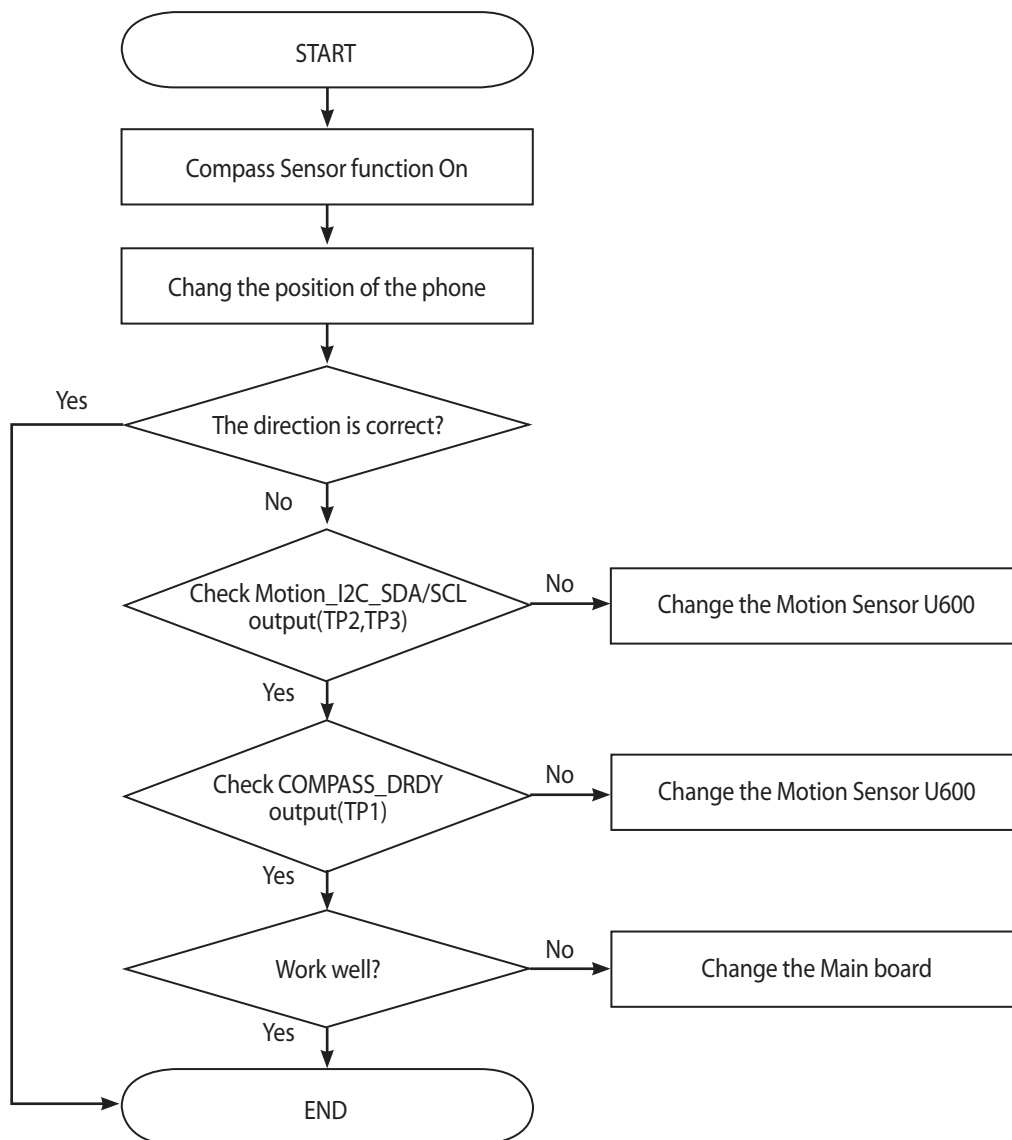
4. TROUBLE SHOOTING



4.16 Compass Sensor on/off Trouble Shooting

Compass Sensor is worked as below :

Compass Sensor function On

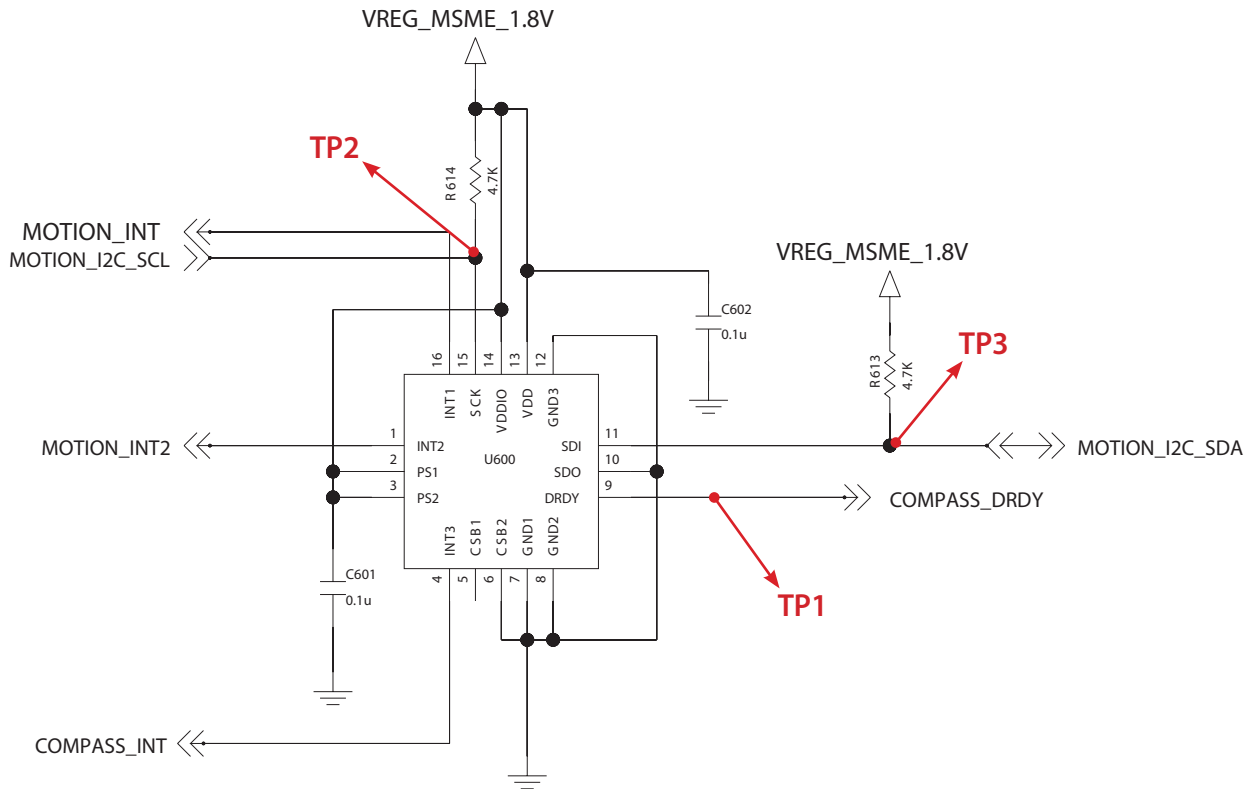


Measurement

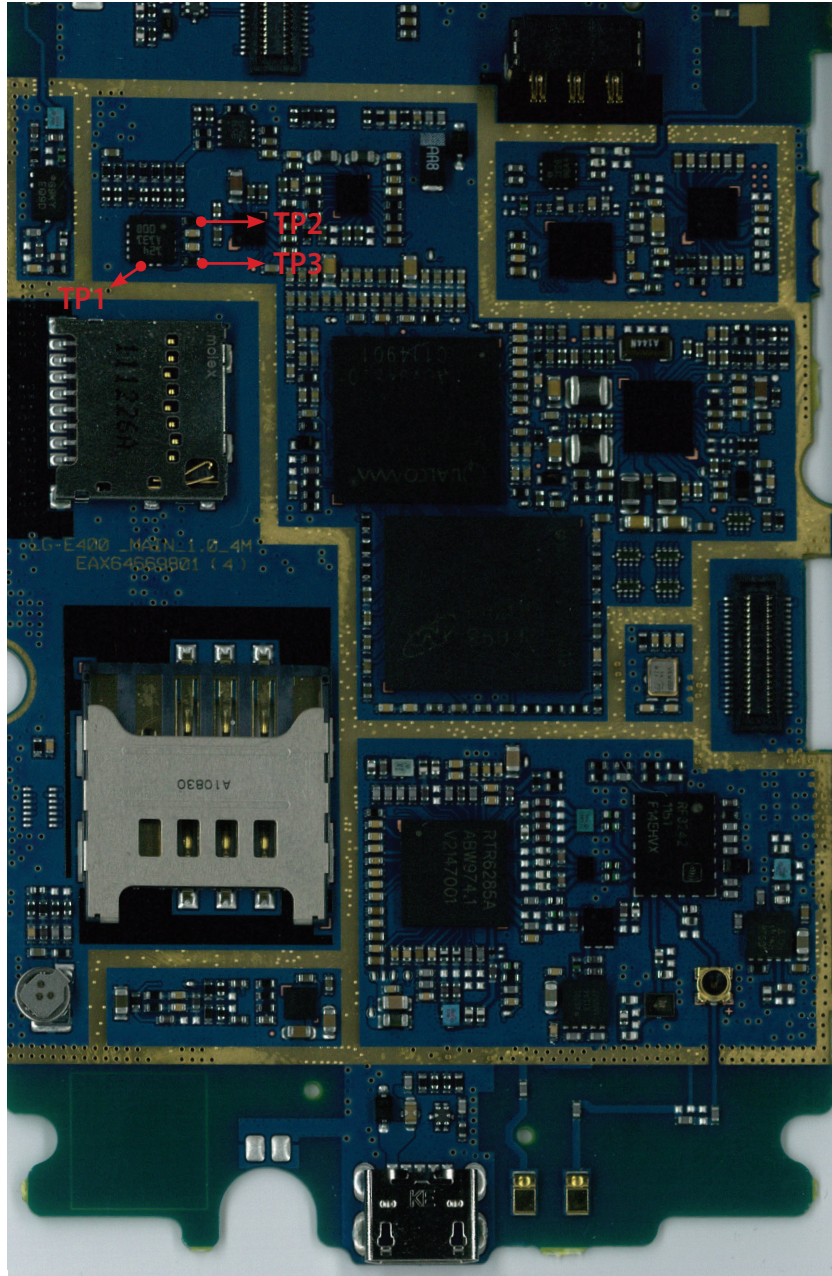
VREG_MSME_1.8V

MOTION_I2C_SCL / SDA

COMPASS_DRDY

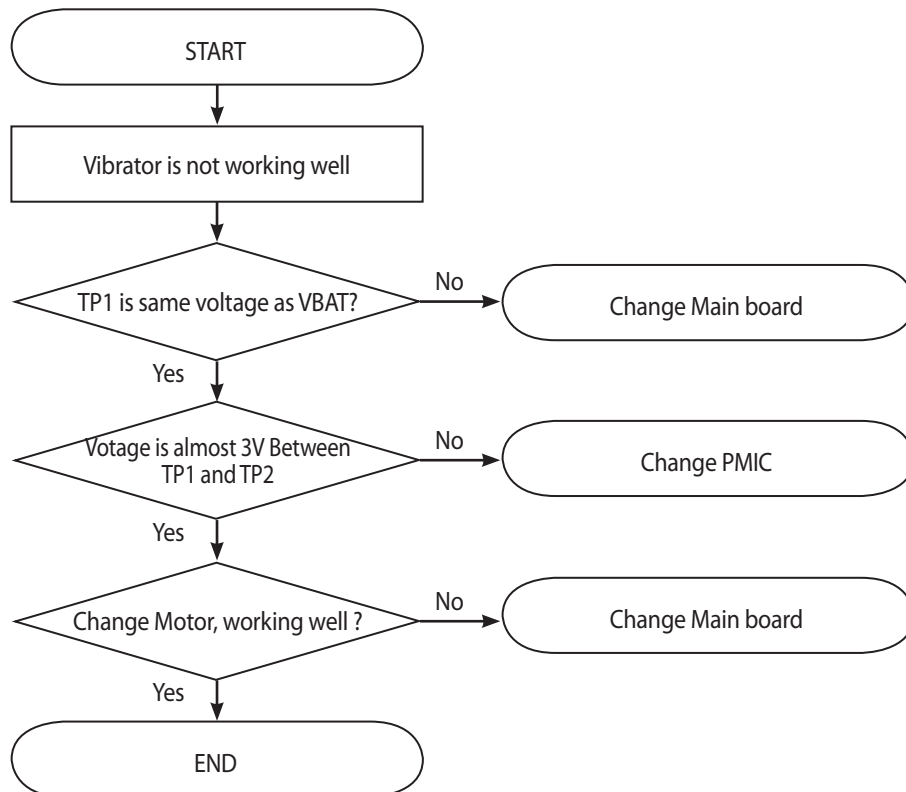


4. TROUBLE SHOOTING



4.17 DC Motor Trouble Shooting

Vibrator is worked as below

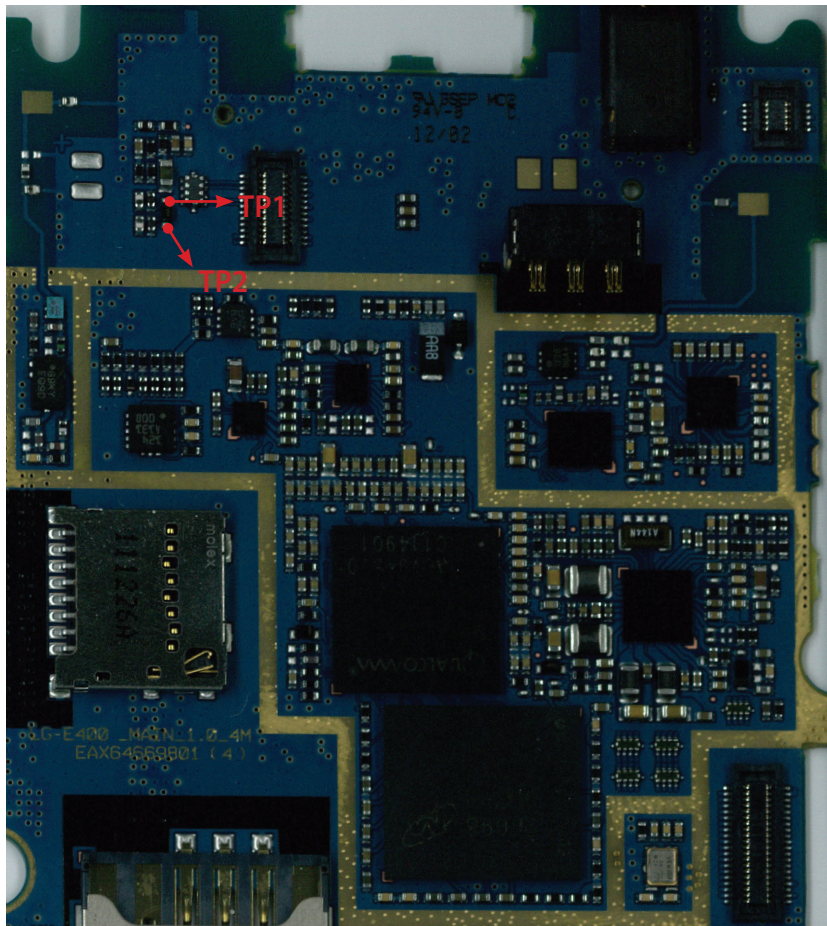
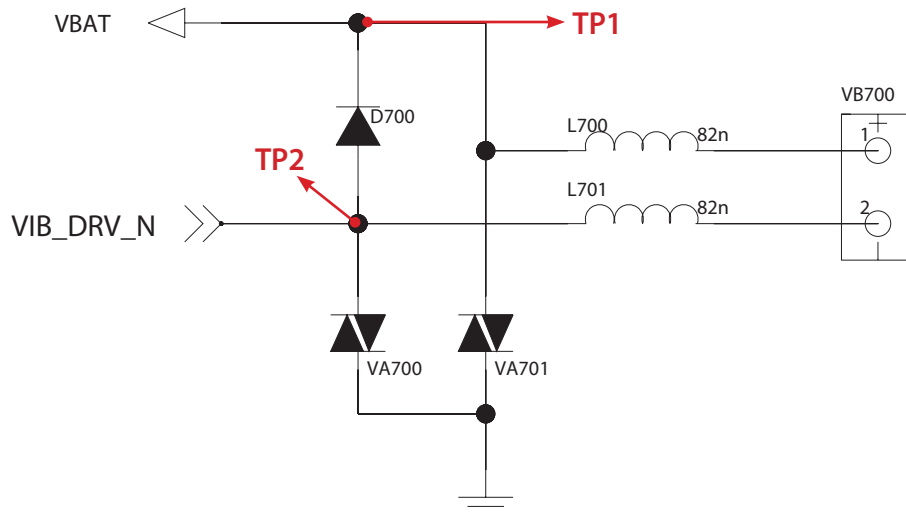


Measurement

VBAT

VIB_DRV_N

4. TROUBLE SHOOTING

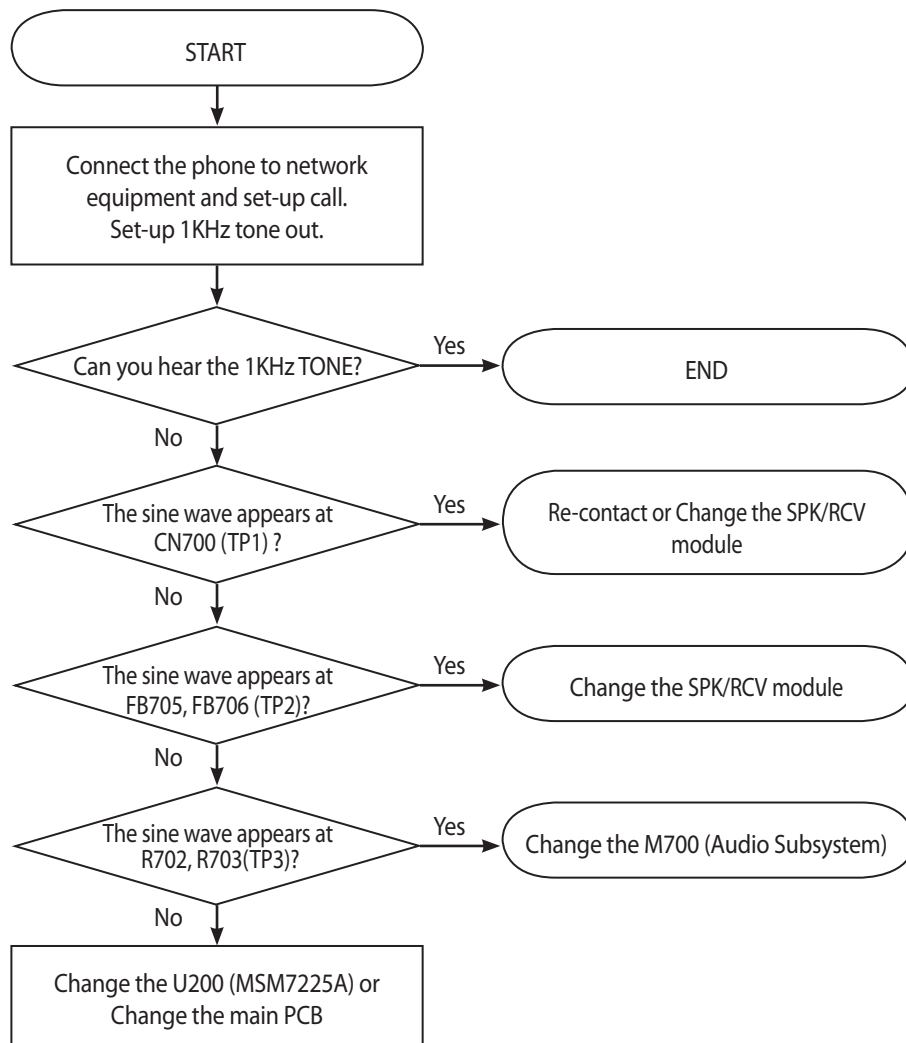


4.18 Audio Trouble

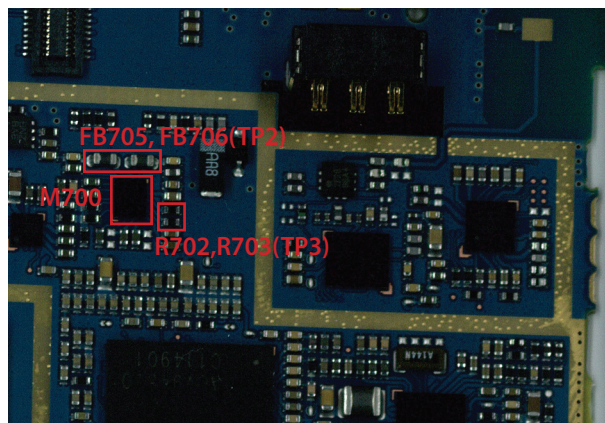
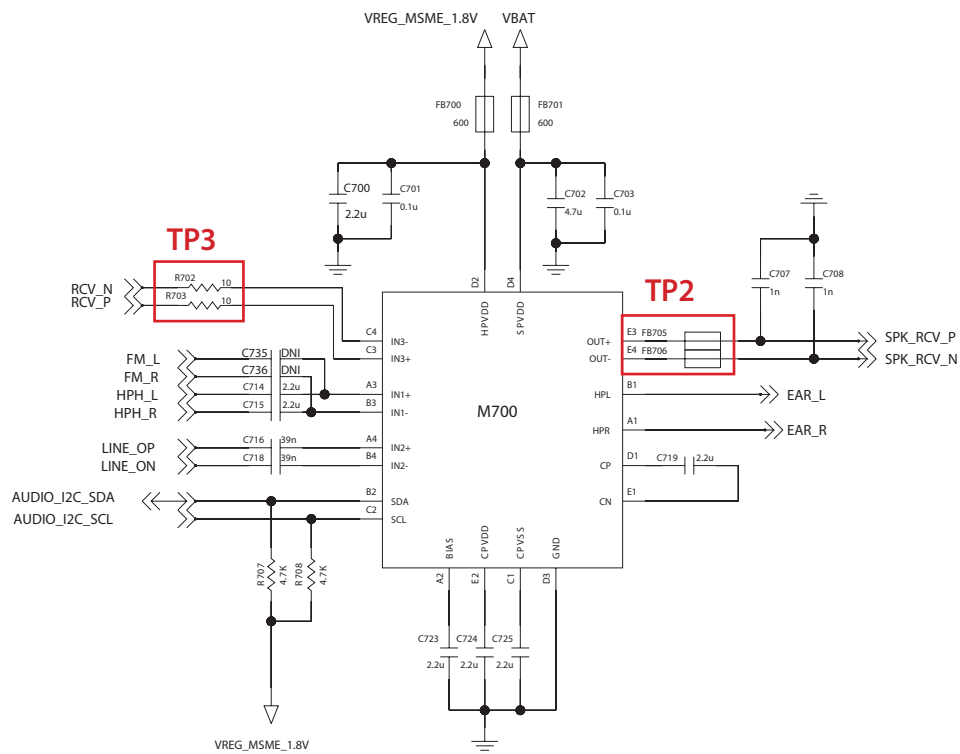
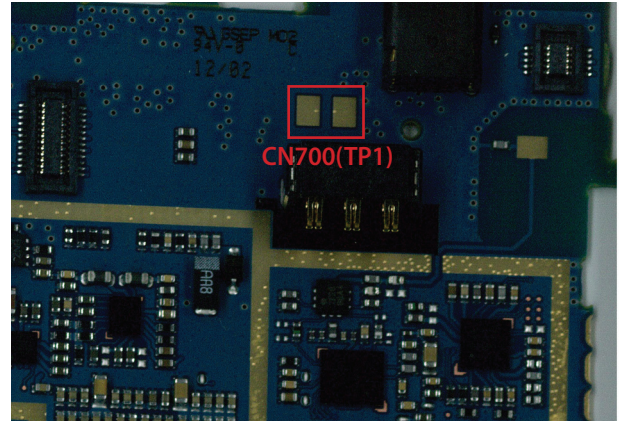
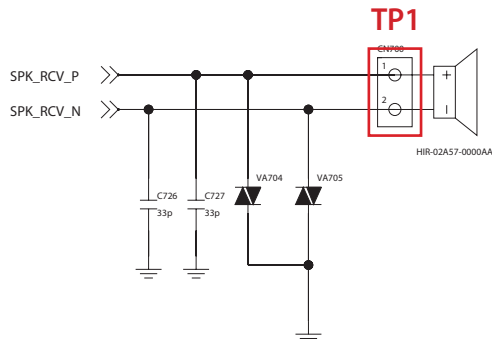
4.18.1 Receiver Path

MSM7225A EAR1_OP, EAR1_ON → RCV_P, RCV_N → R702, R703 (TP3) →

M700 (TPA2055D3: Audio Subsystem) → FB705, FB706 (TP2) → CN700 (TP1) (Antenna + SPK pad)



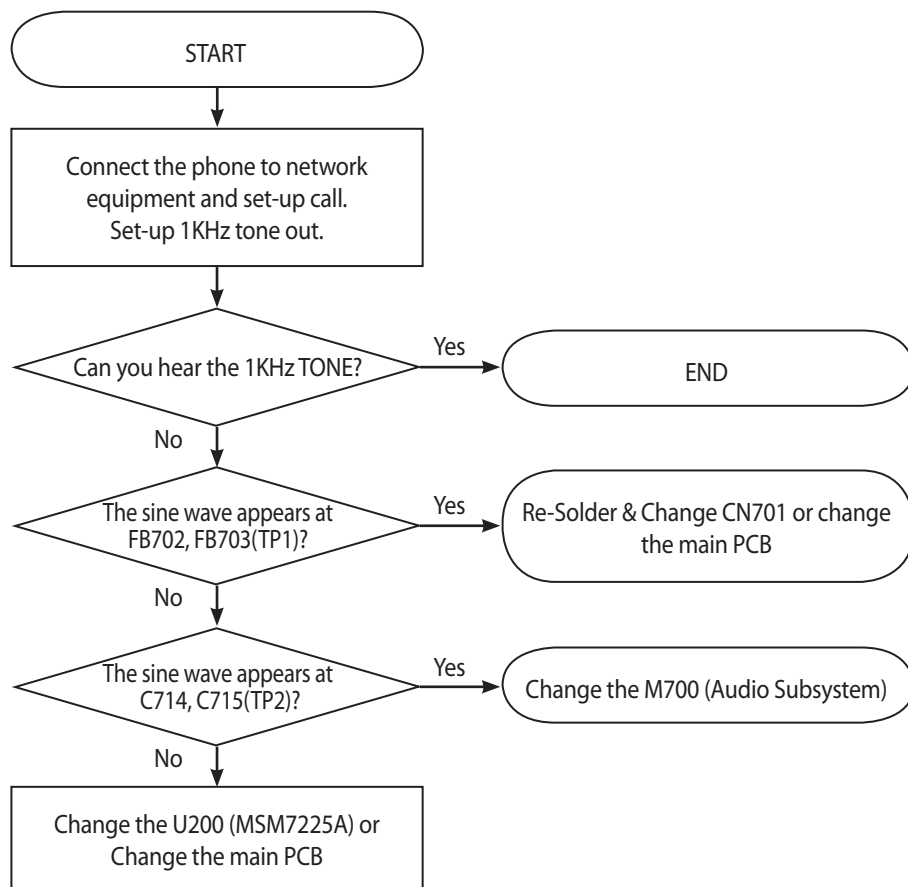
SPEAKER

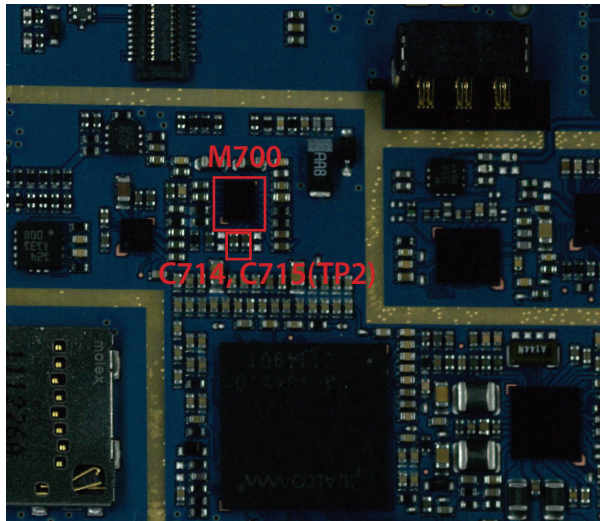
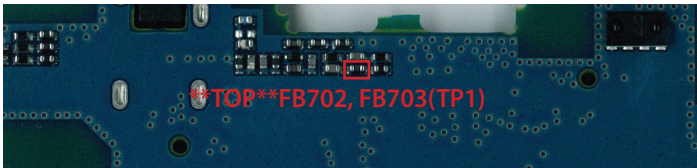
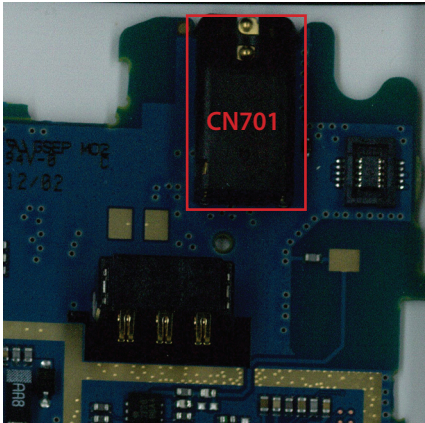


4.18.2 Headset path

MSM7225A HPH_R, HPH_L → C714, C715(**TP2**) → M700 (TPA2055D3: Audio Subsystem) →

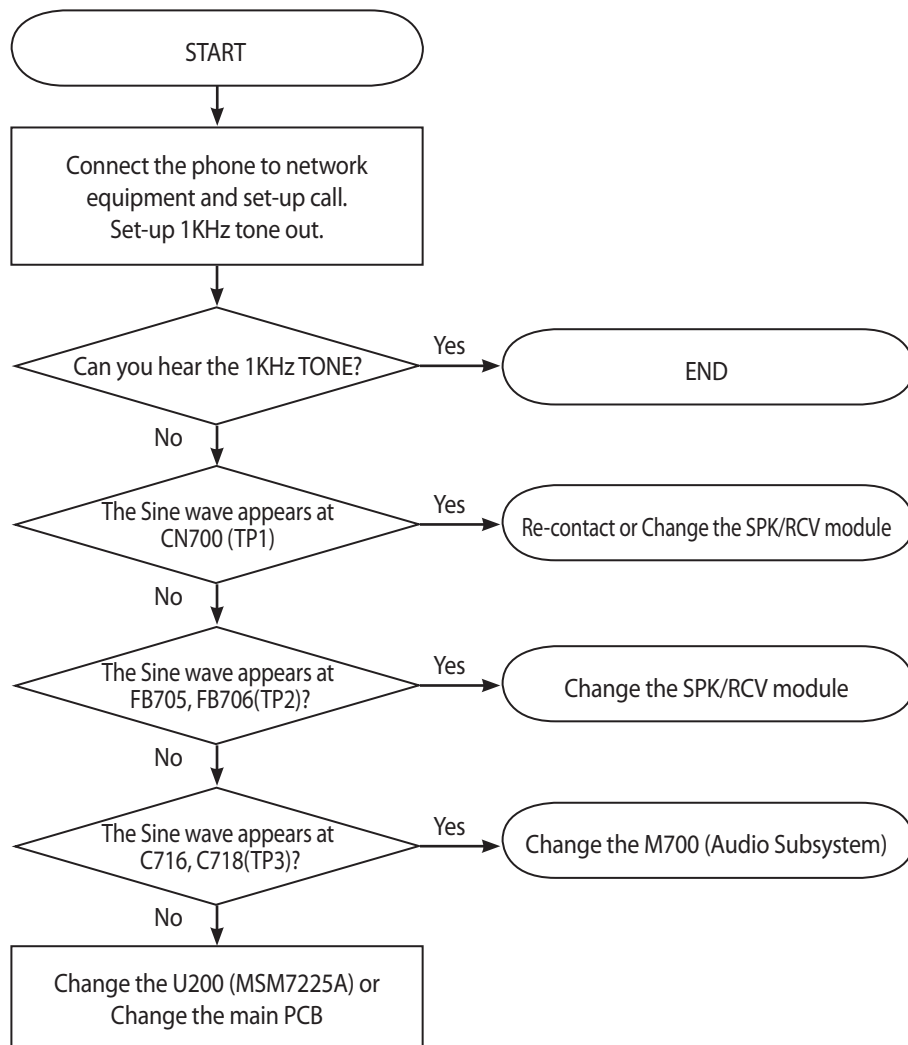
R710, R711 → FB702, FB703(**TP1**) → CN701 (3.5pi Ear-jack)



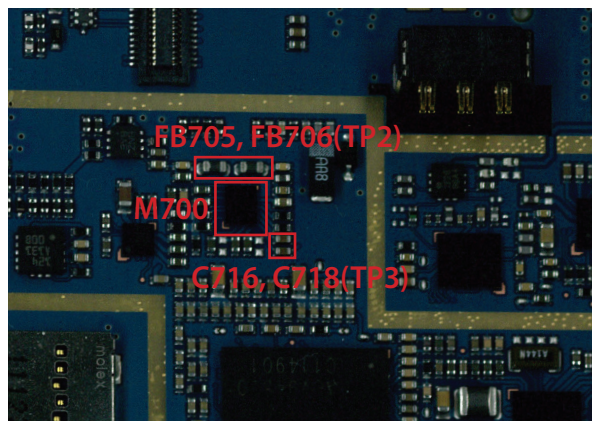
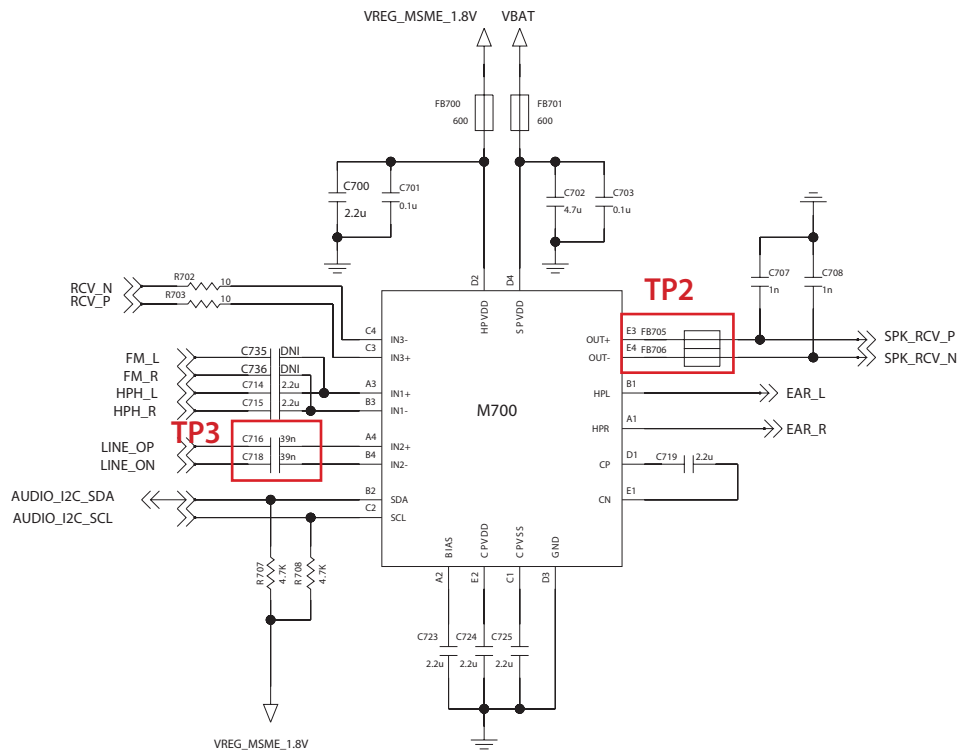
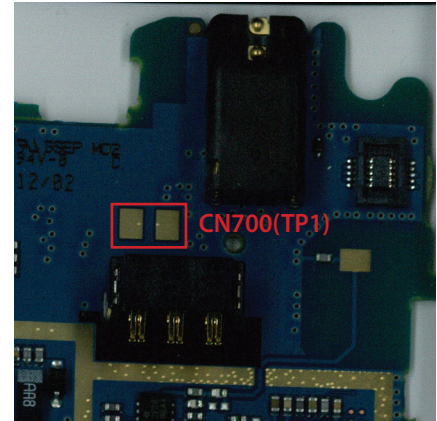
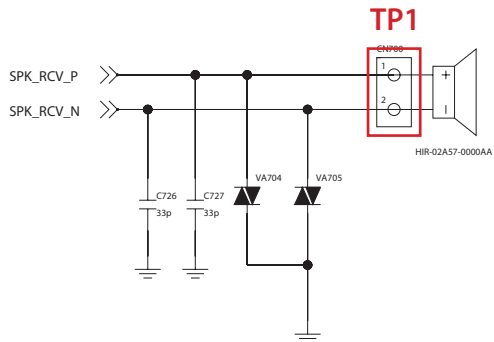


4.18.3 Speaker/Speaker Phone path

MSM7225A LINE_OP, LINE_ON → C716, C718(**TP3**) → M700(TPA2055D3 : Audio Subsystem) → FB705, FB706(**TP2**) → CN700(**TP1**)(Antenna + SPK pad)



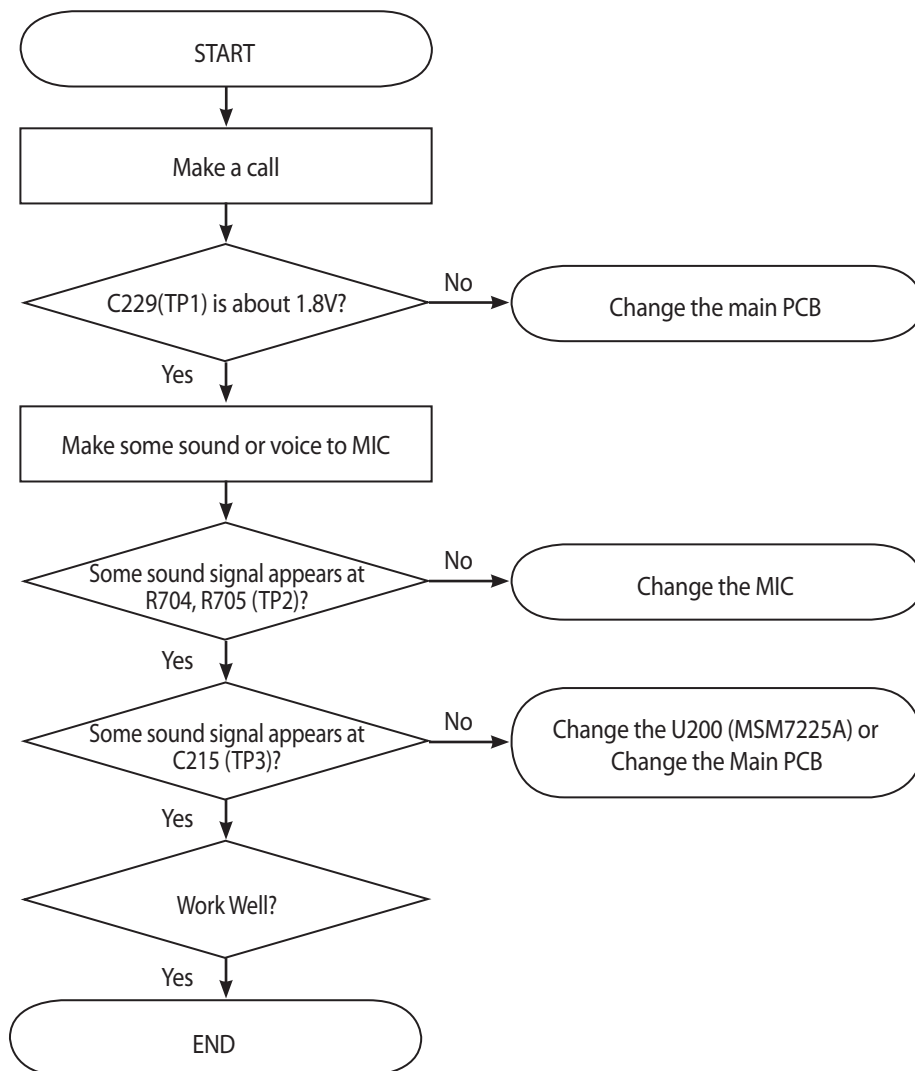
SPEAKER



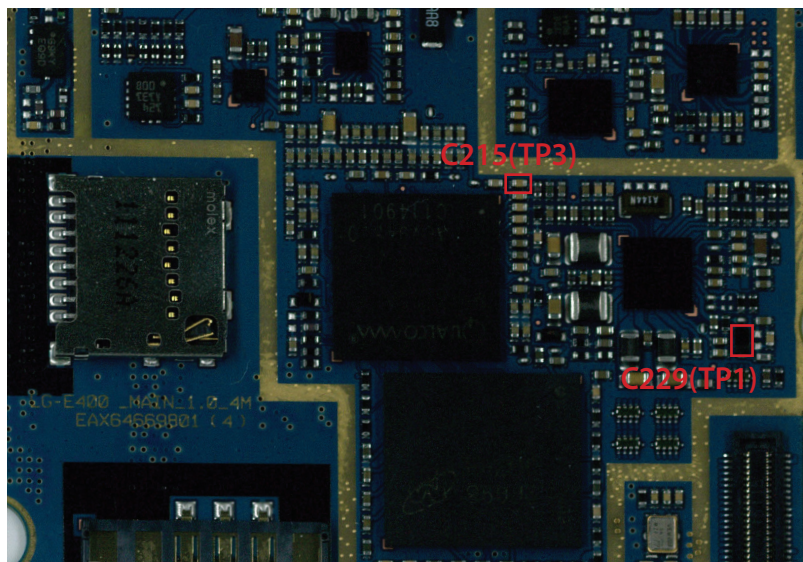
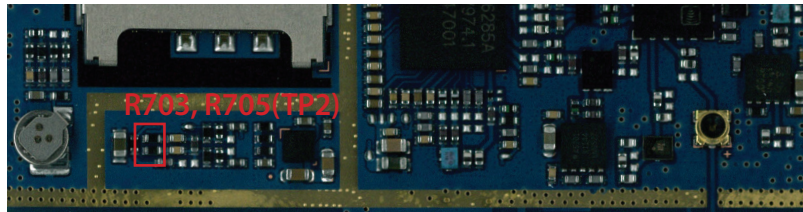
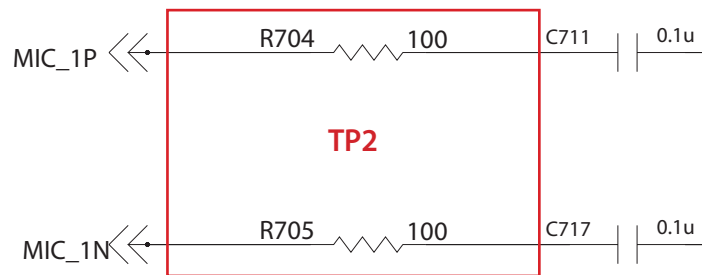
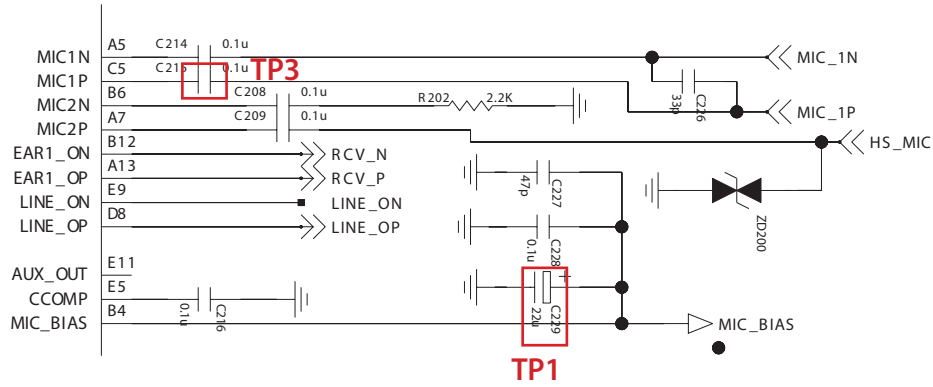
4.18.4 Main Microphone

MIC Signal: MIC700 → R704, R705 (TP2) → C215 (TP3) MIC1P of MSM7225A

MIC Bias: MIC_BIAS → C229 (TP1) → MIC700



4. TROUBLE SHOOTING

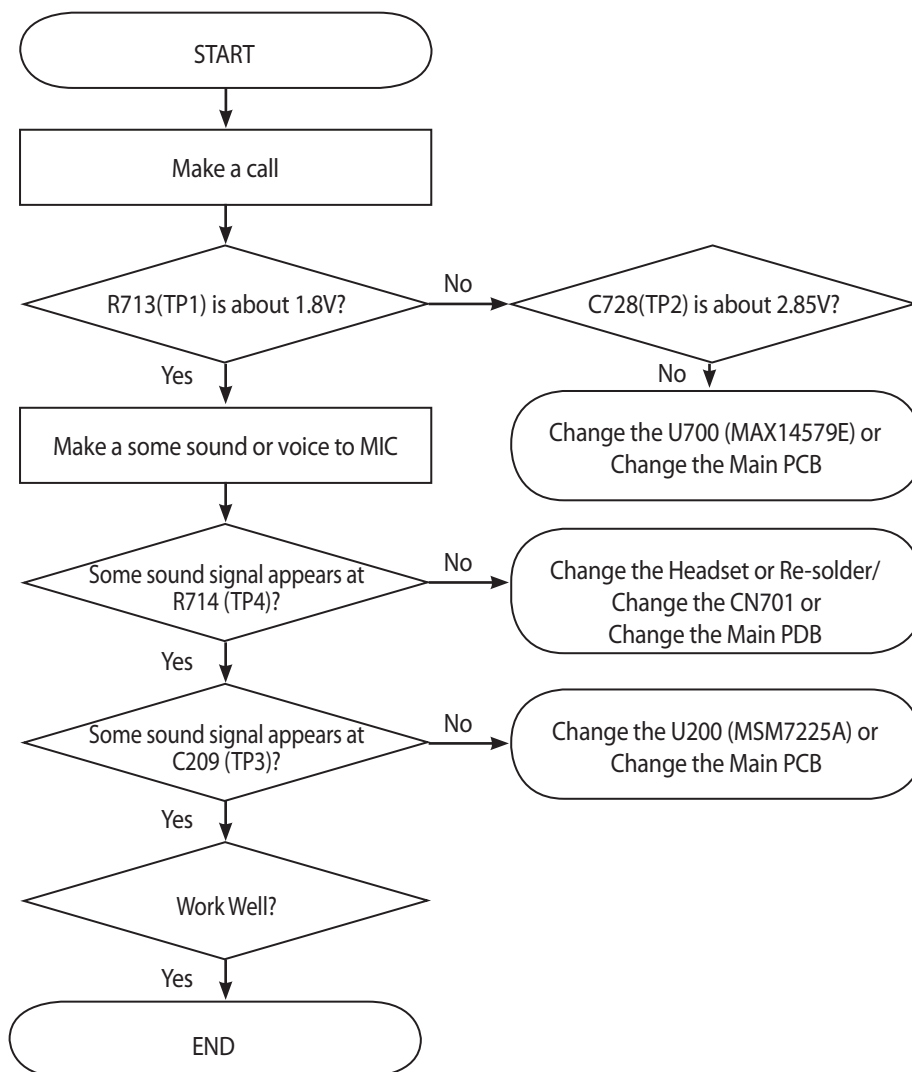


4.18.5 Headset mic ophone

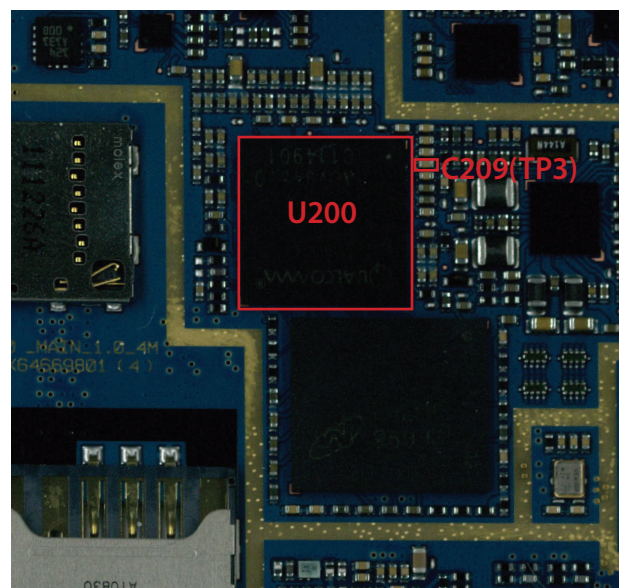
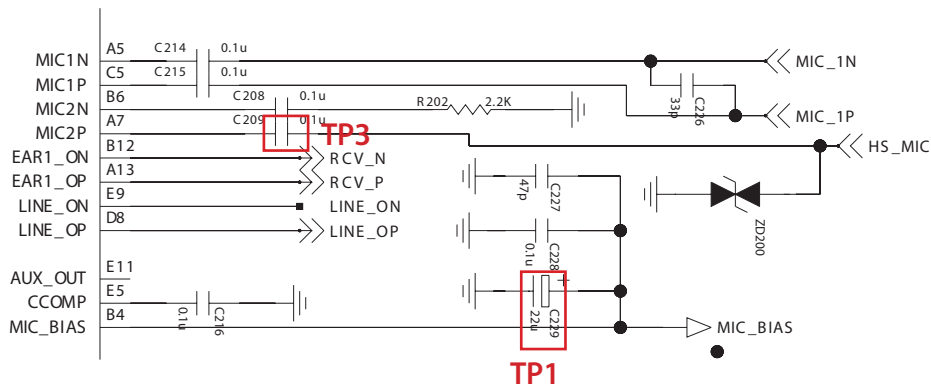
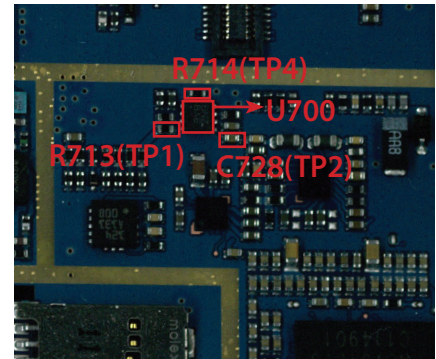
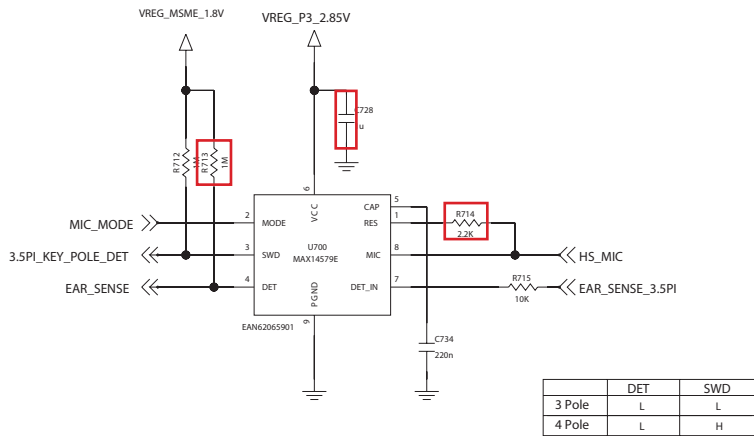
MIC Signal: 3.5 pi Headset (CN701) → FB704 → R714 (**TP4**) MIC of MAX14579E & C209 (**TP3**) MIC2P of MSM7225A

MIC Bias : VREG_MSME_1.8V → R713 (**TP1**) DET → R715 DET_IN → Headset MIC

HS Detect IC Bias: VREG_P3_2.85V → C728 (**TP2**)

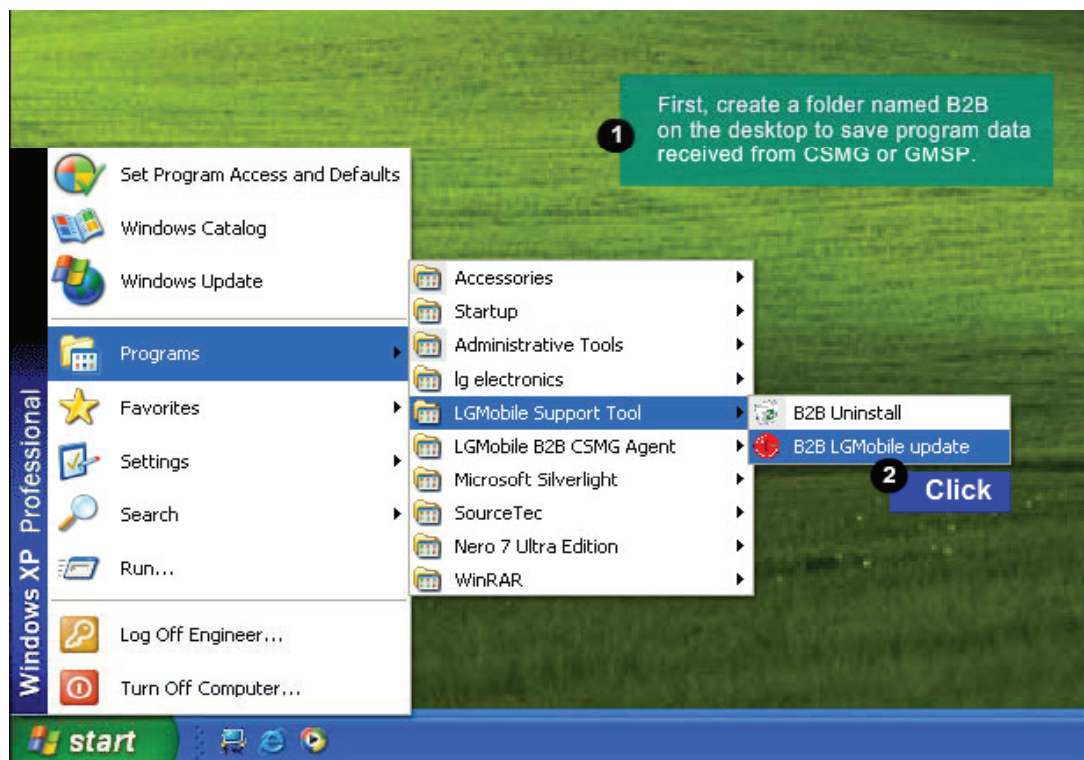


4. TROUBLE SHOOTING

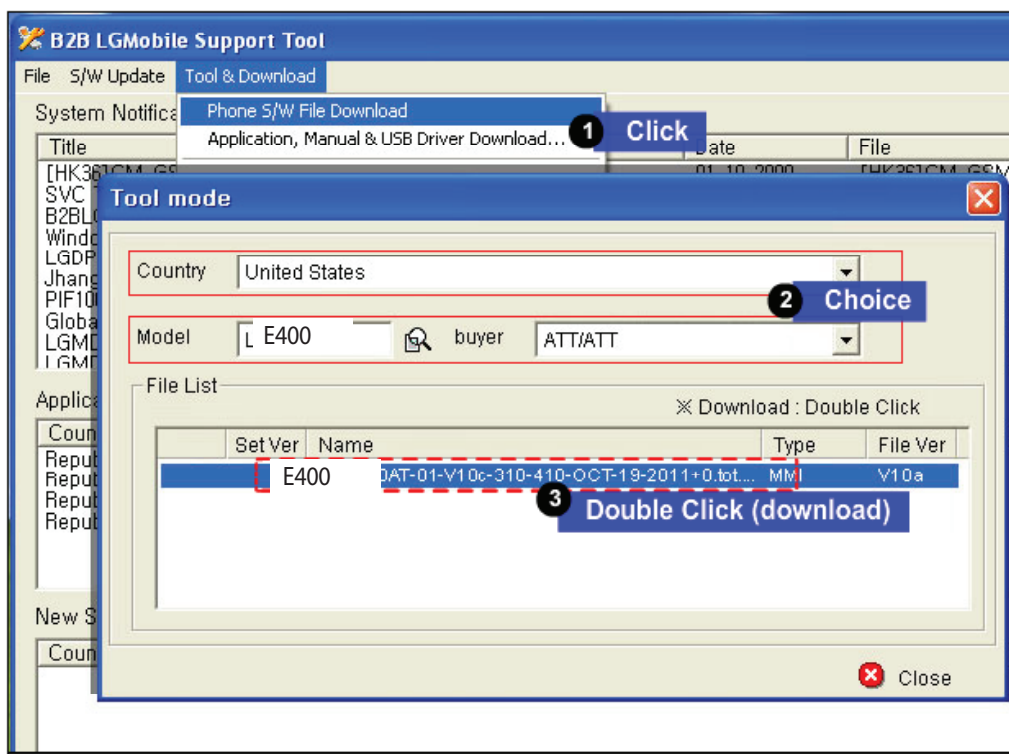
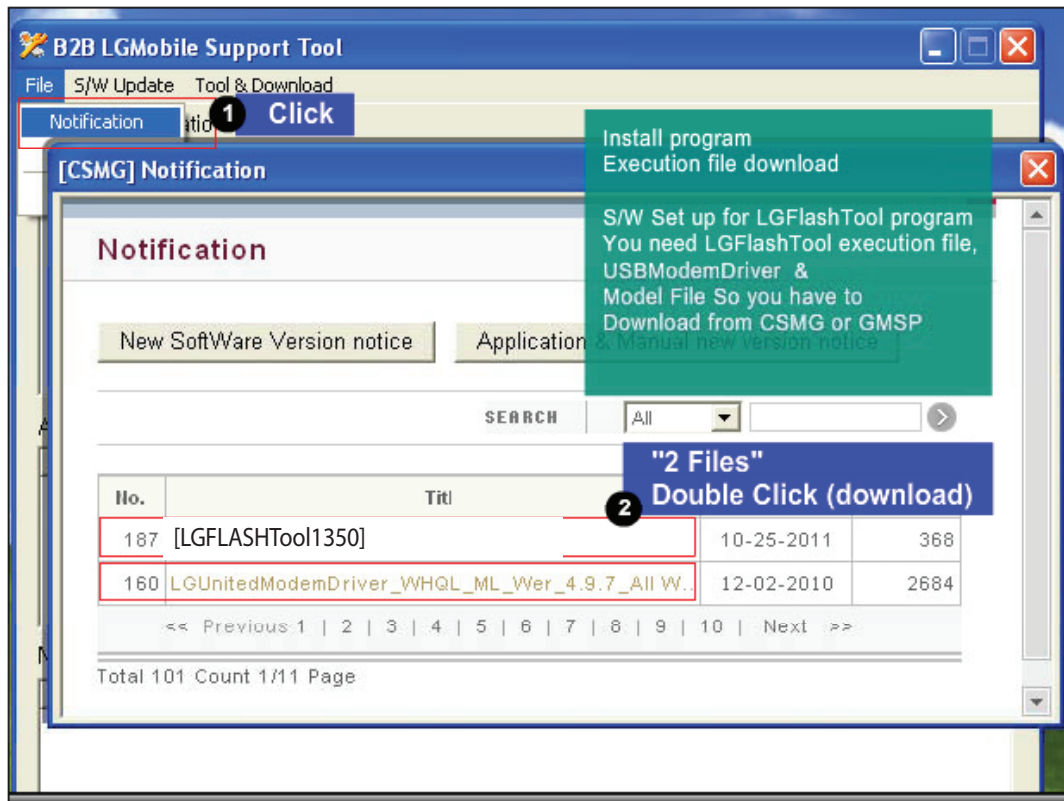


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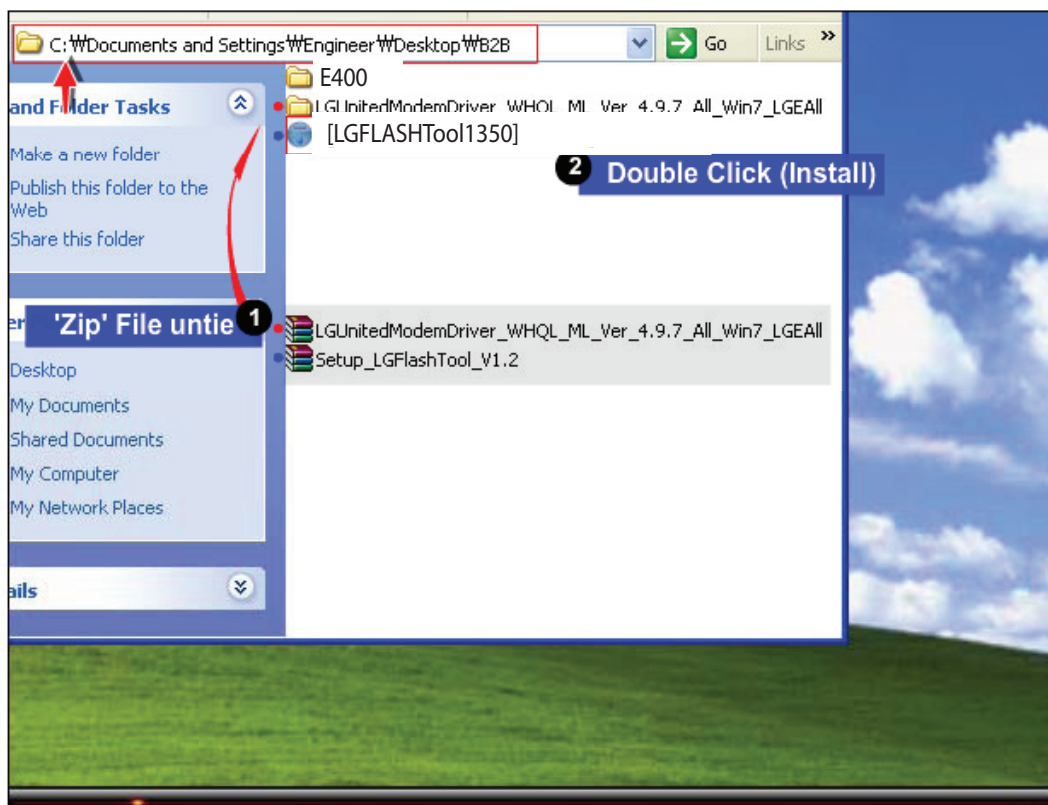
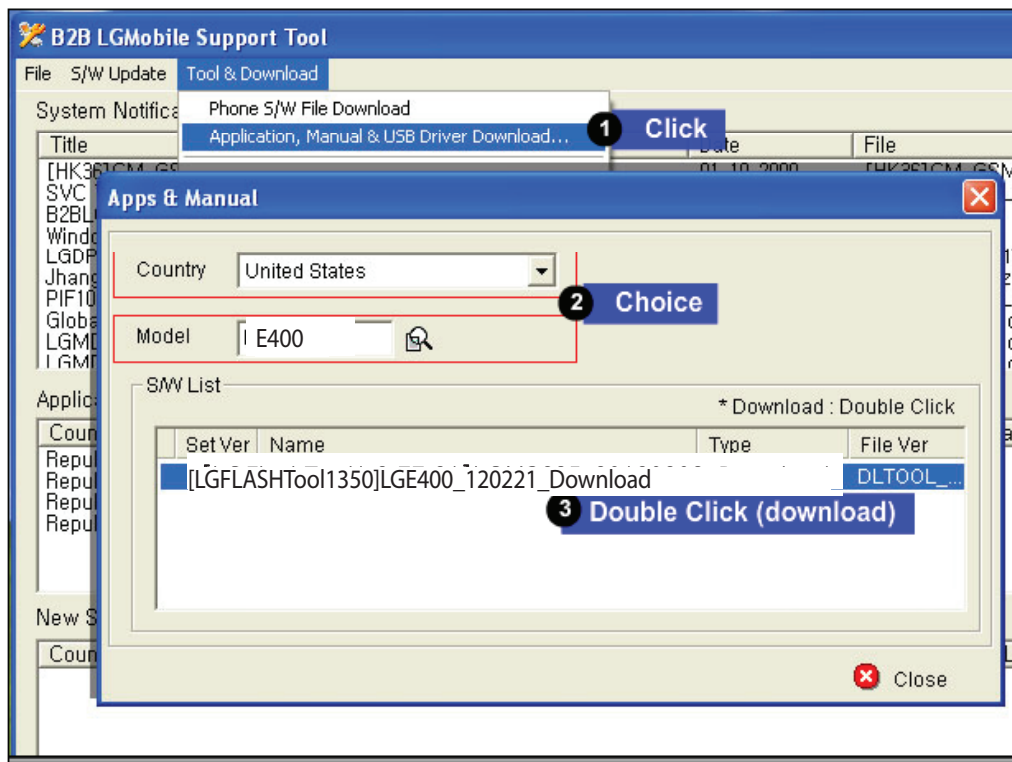
TOOL INFORMATION		
TOOL VERSION	DLL NAME	USB DRIVER
[LGFLASHTool1350]	[LGFLASHTool1350]LGE400_120221_Download	LGUnitedMobileDriver_54981CA22_ML_WHQL_Ver_2.2.1
H/W		
	Name	Part No.
D/L Cable	Micro 5P USB DLC (56-130-910K)	BJAY0023973

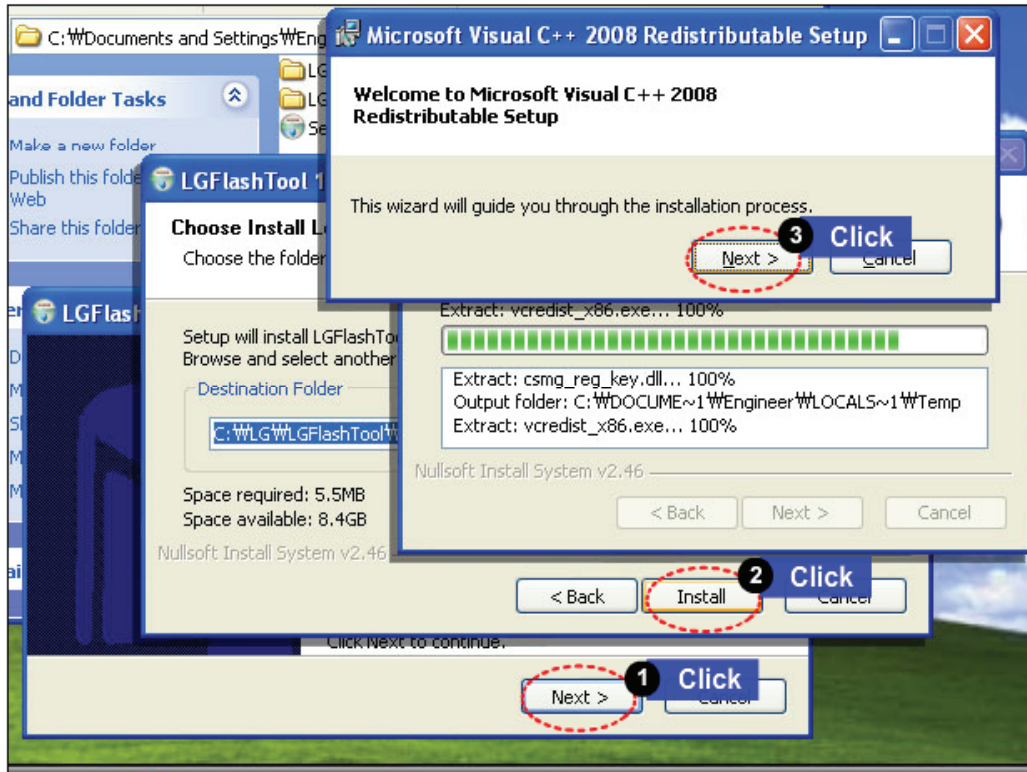


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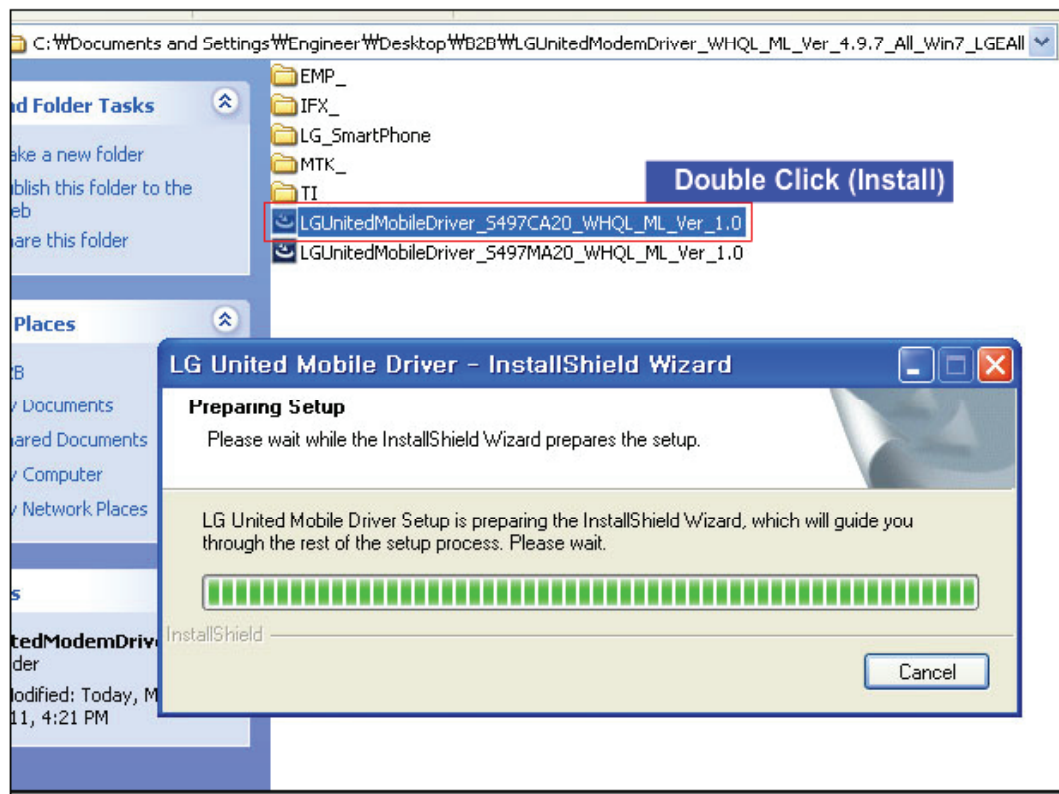
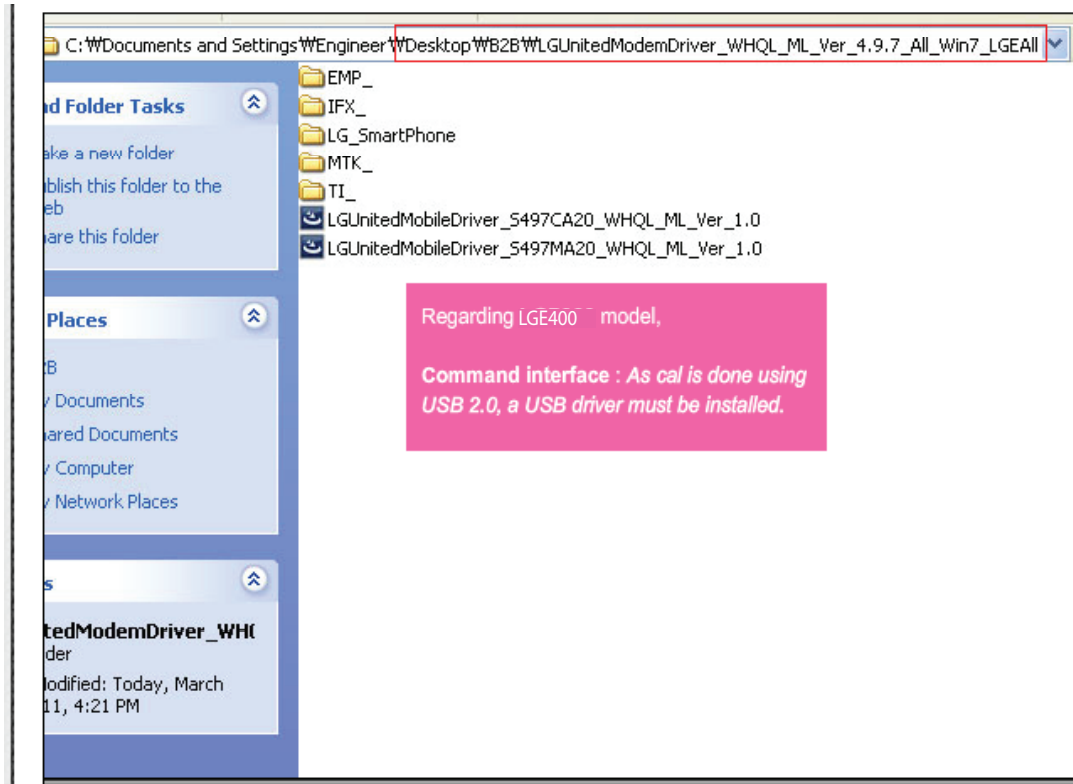


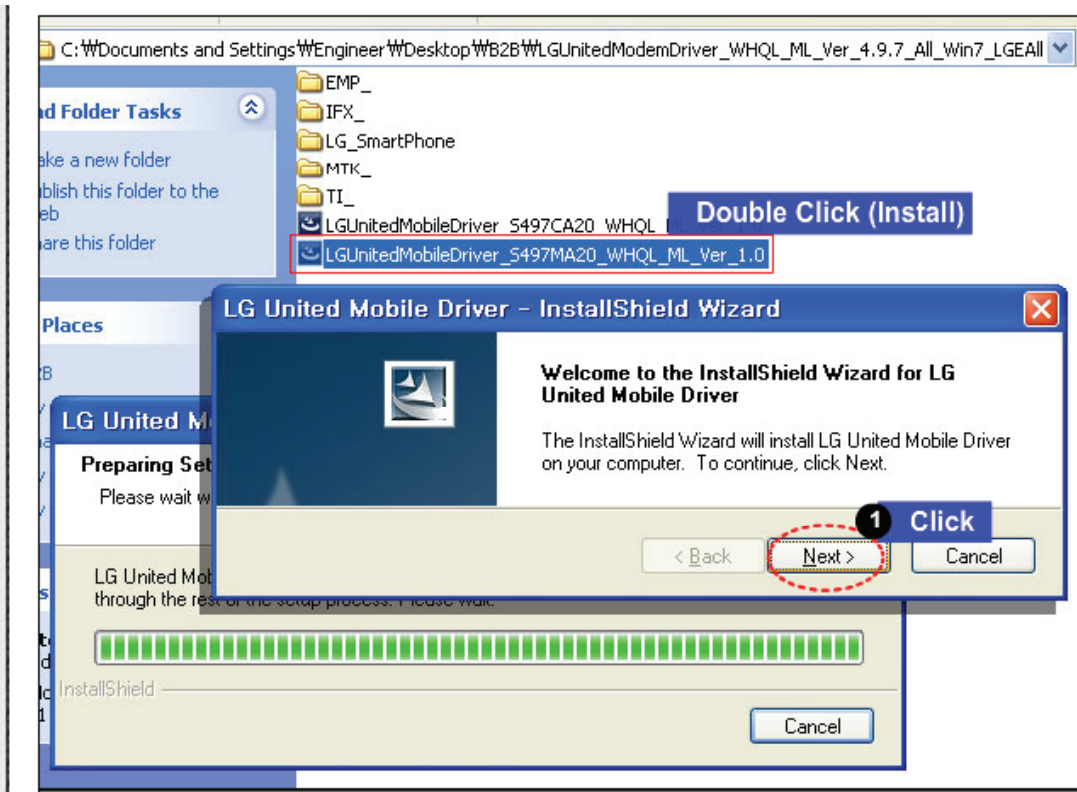
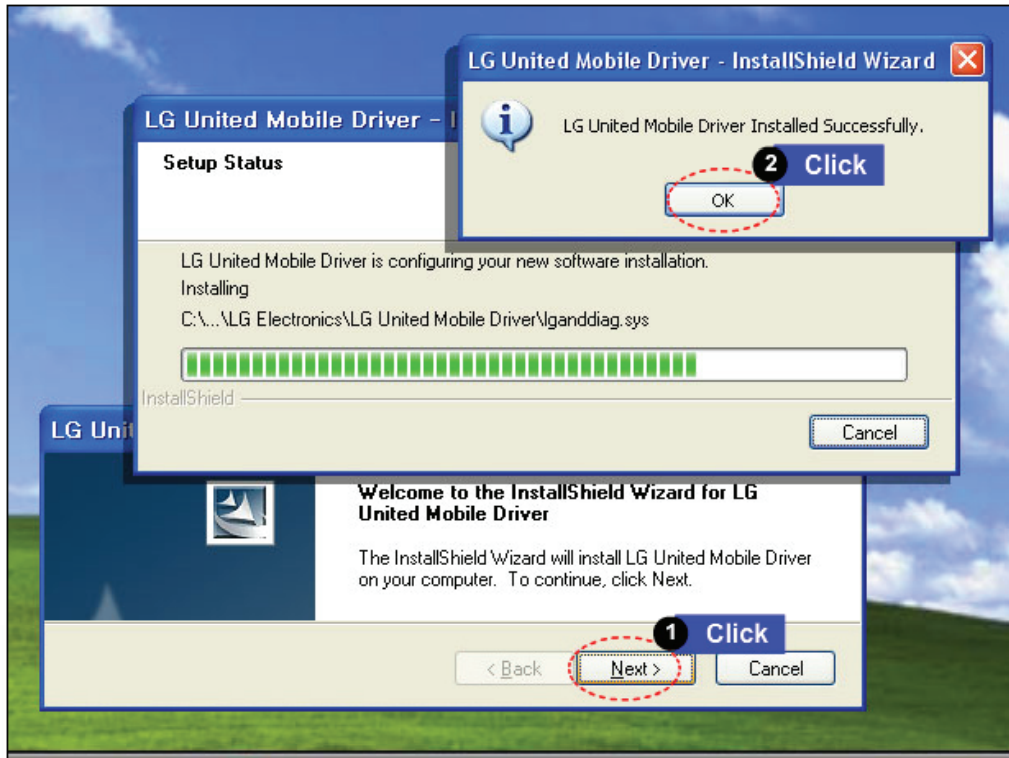
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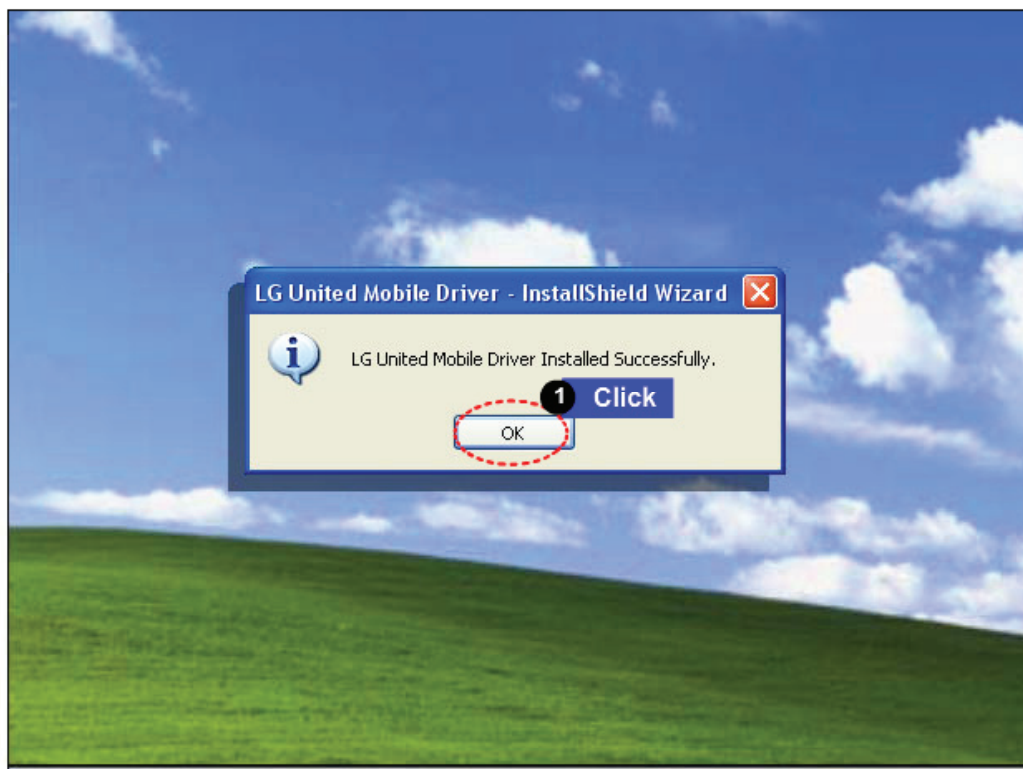
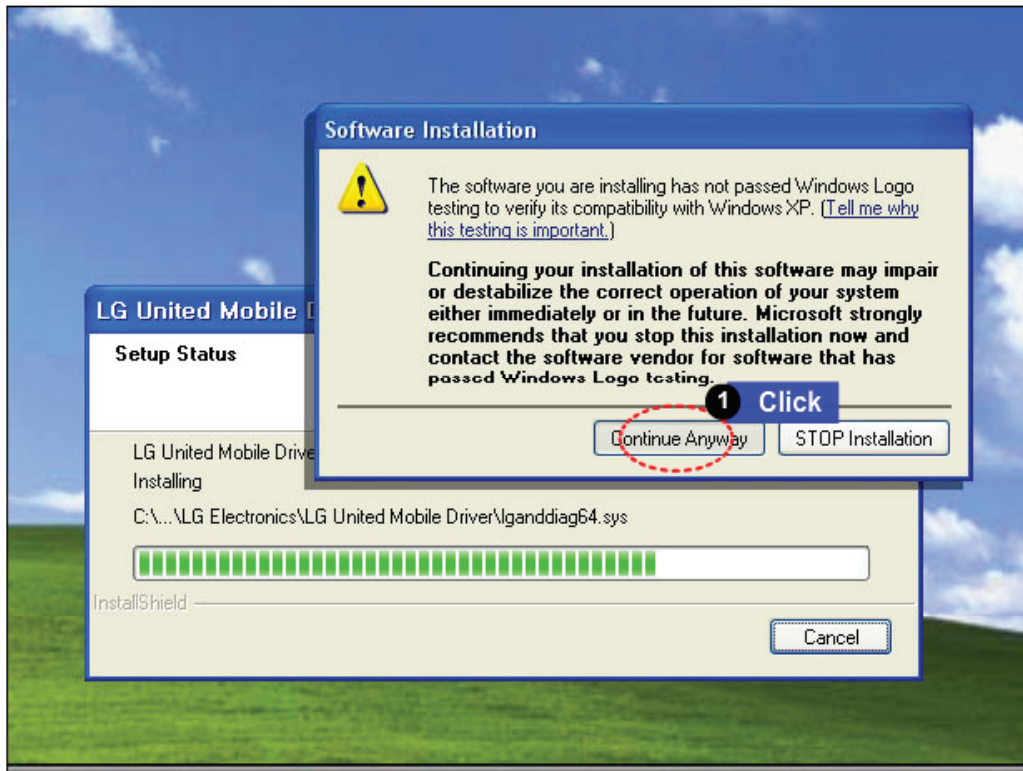




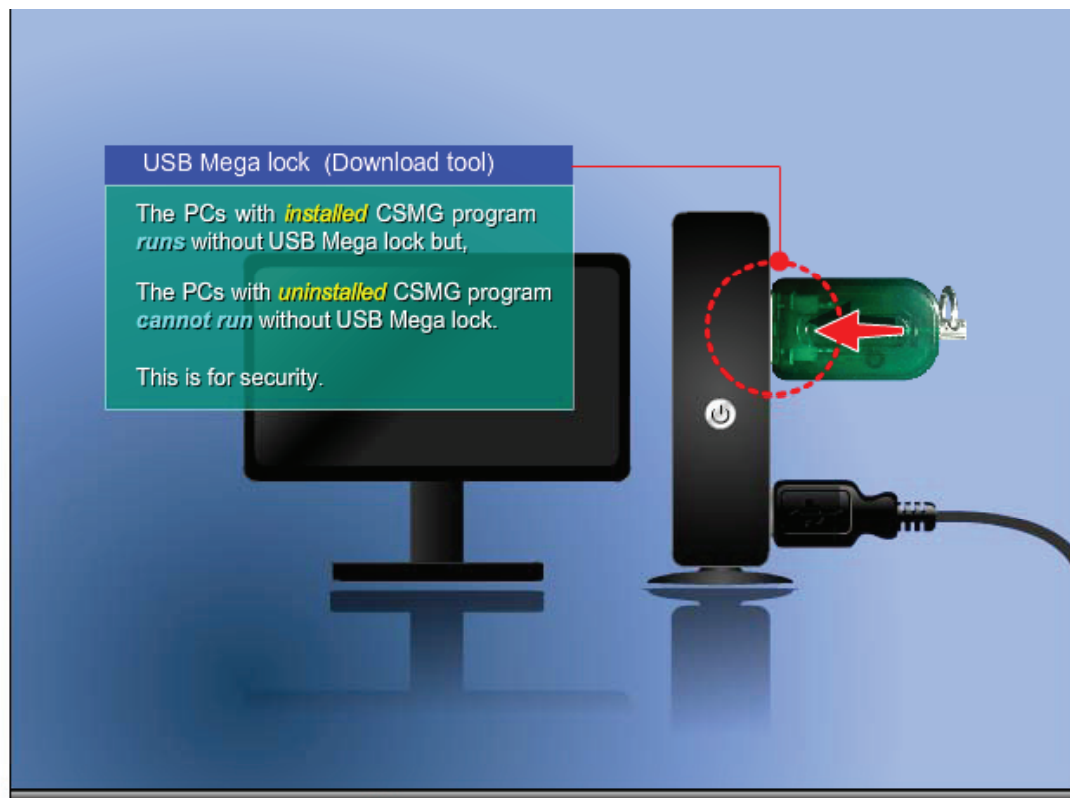
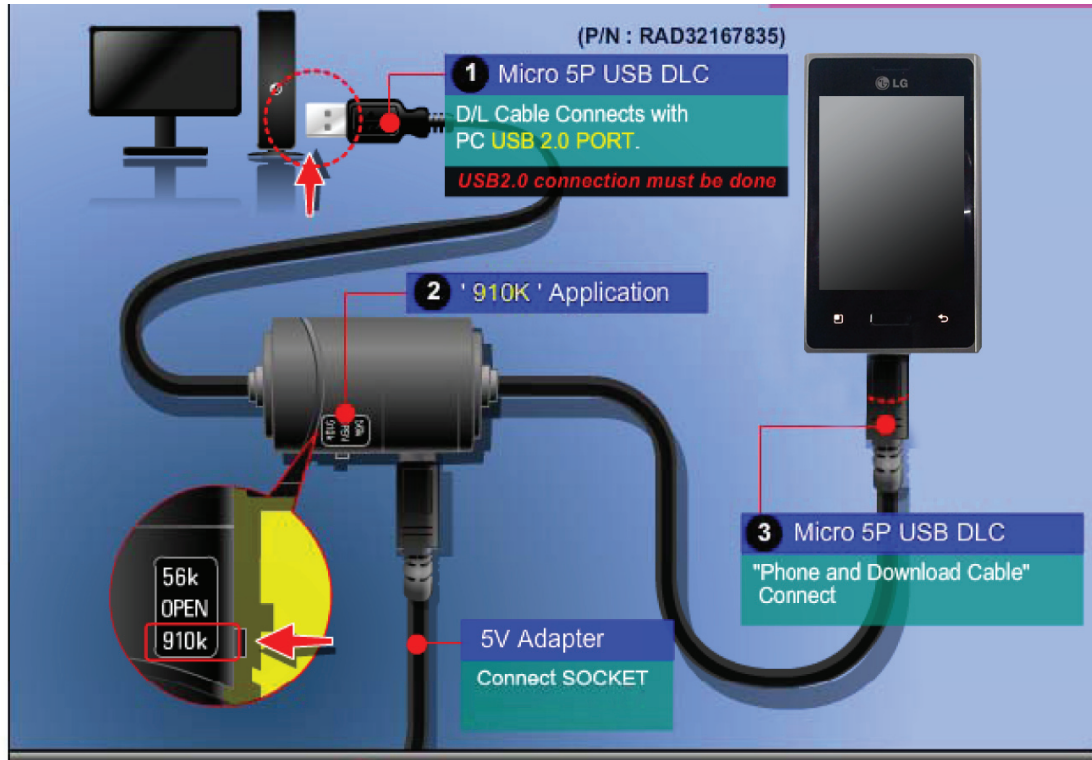
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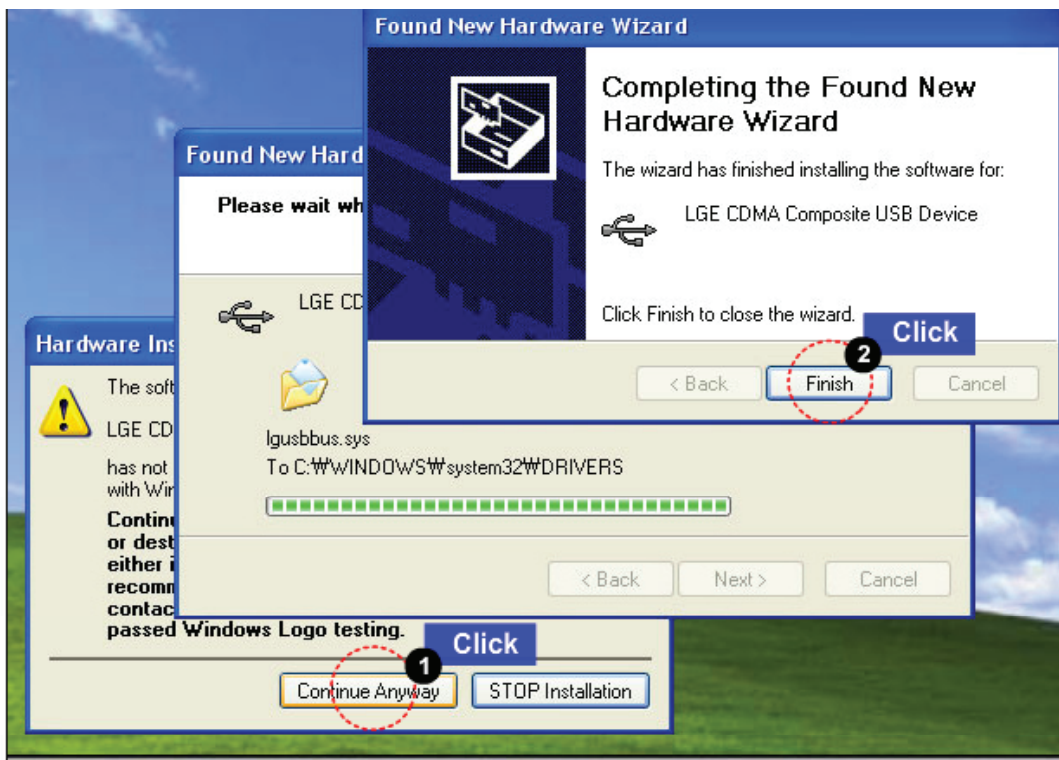
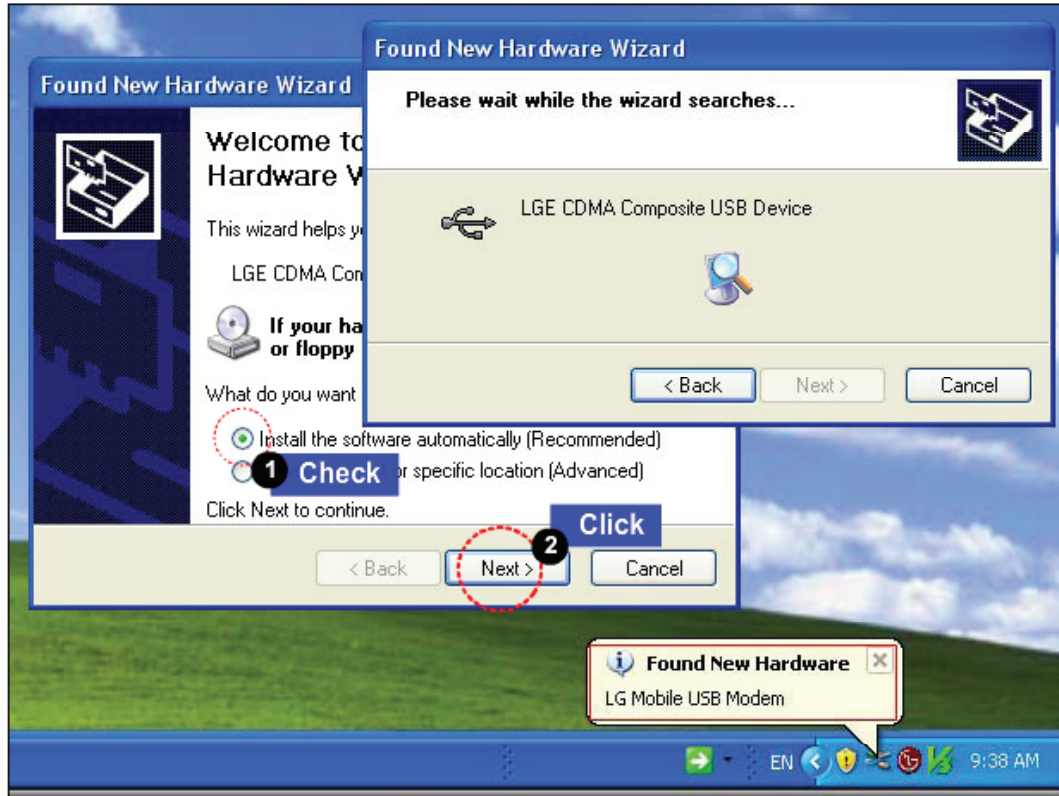




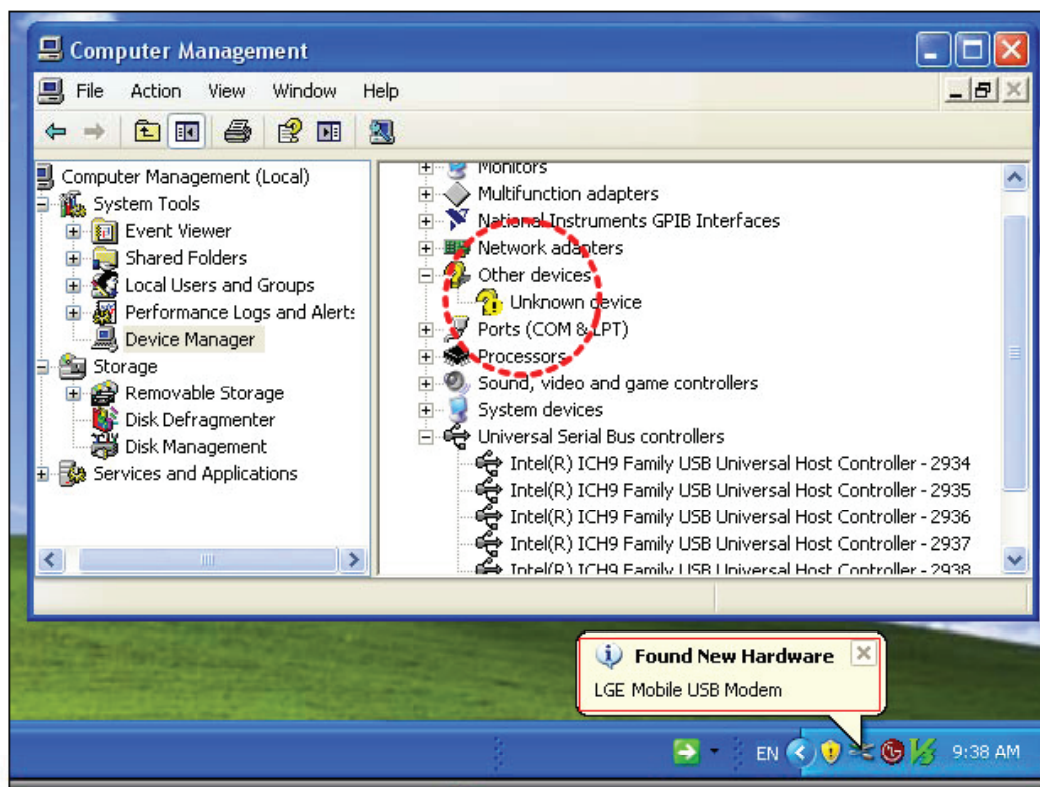
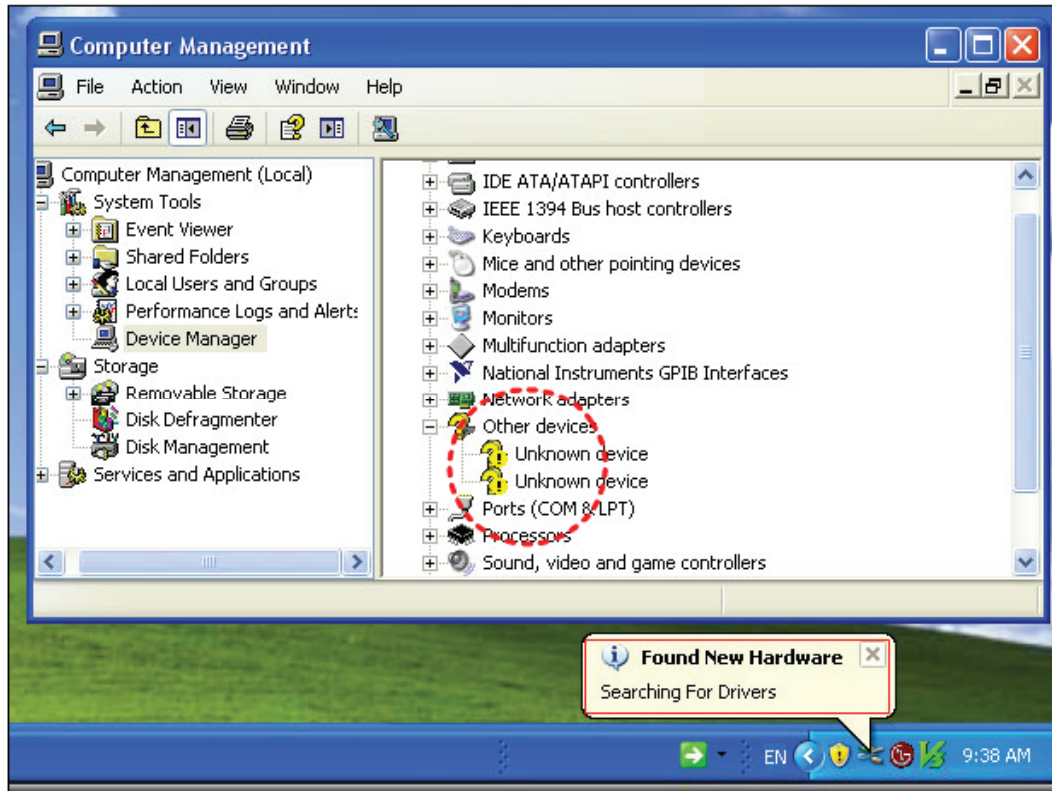


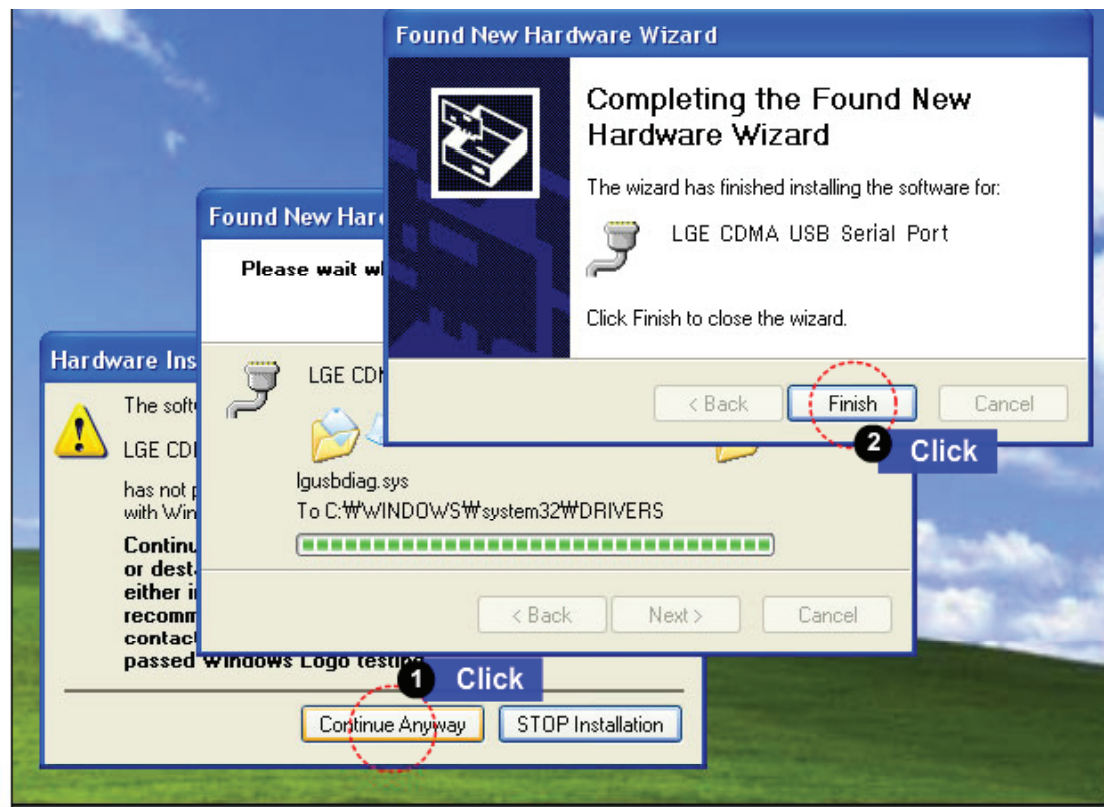
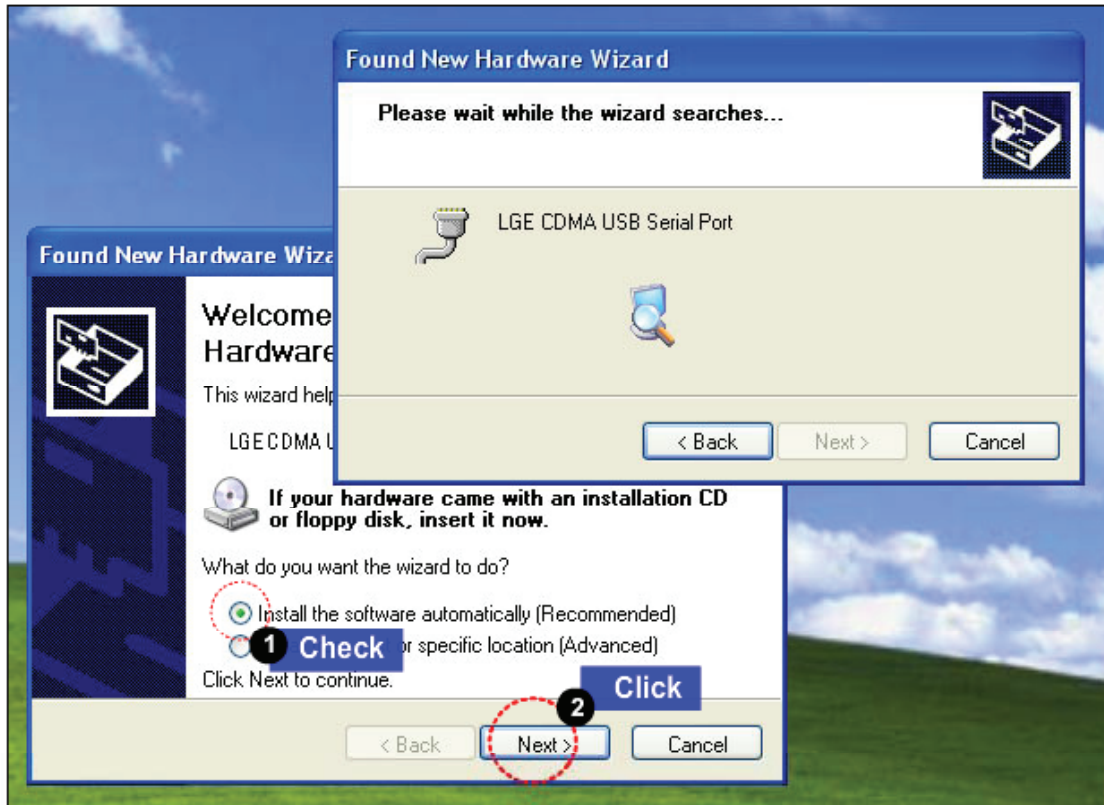
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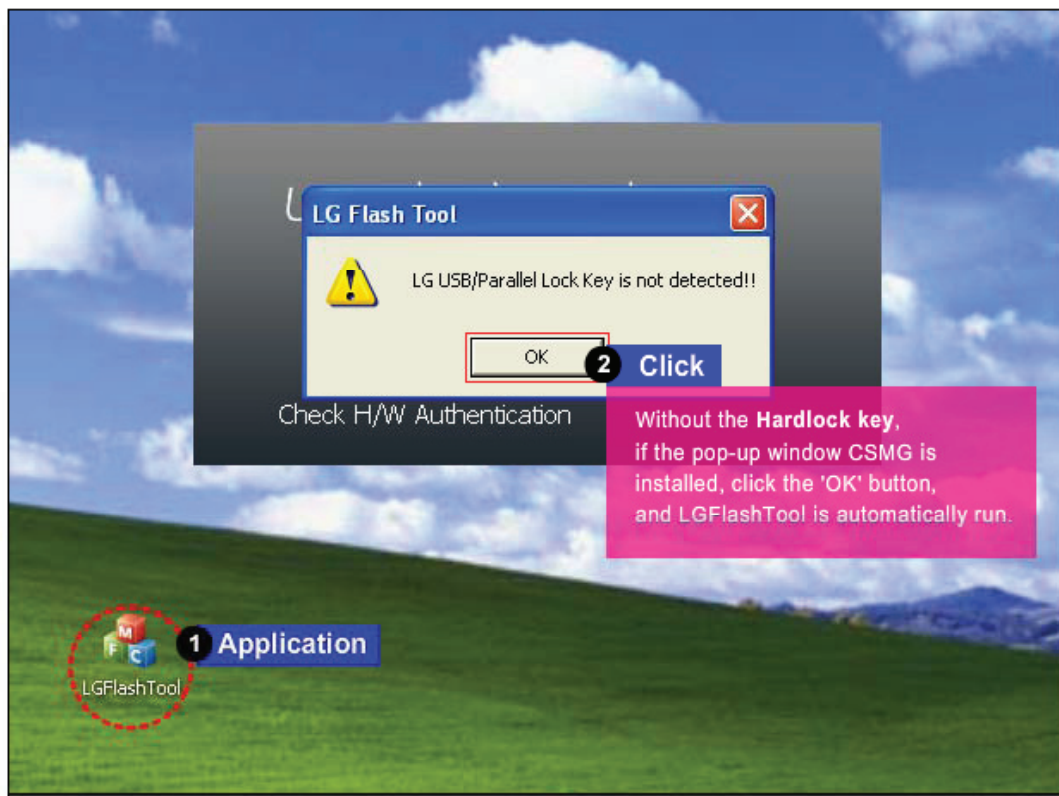
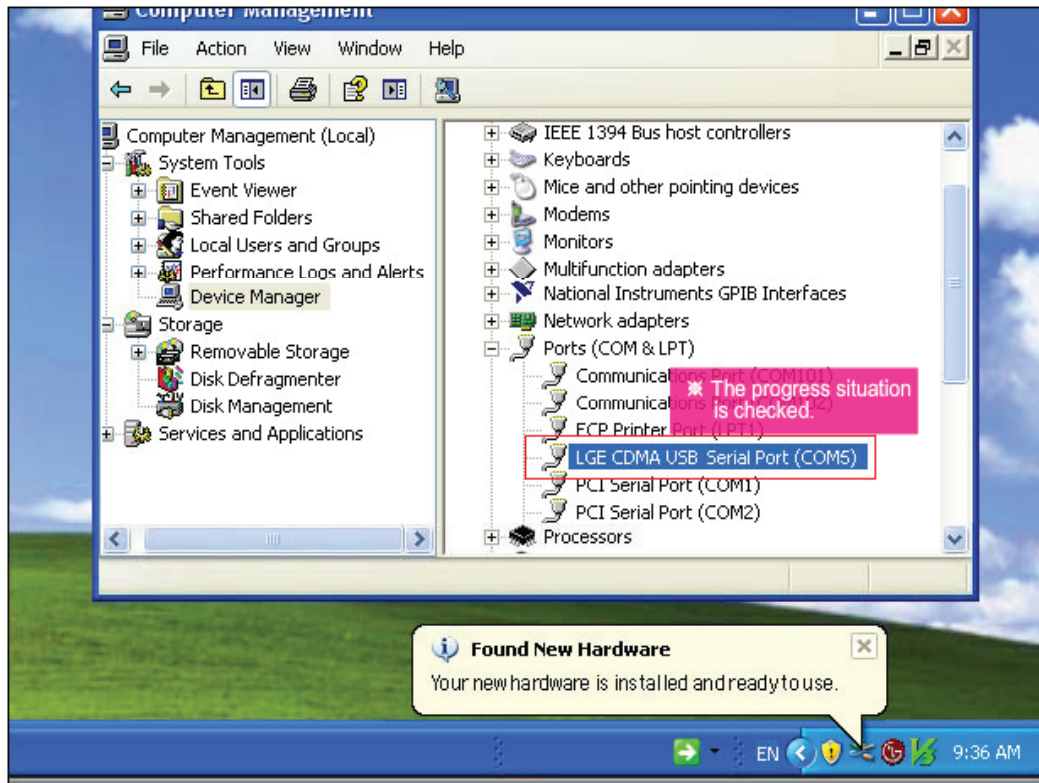


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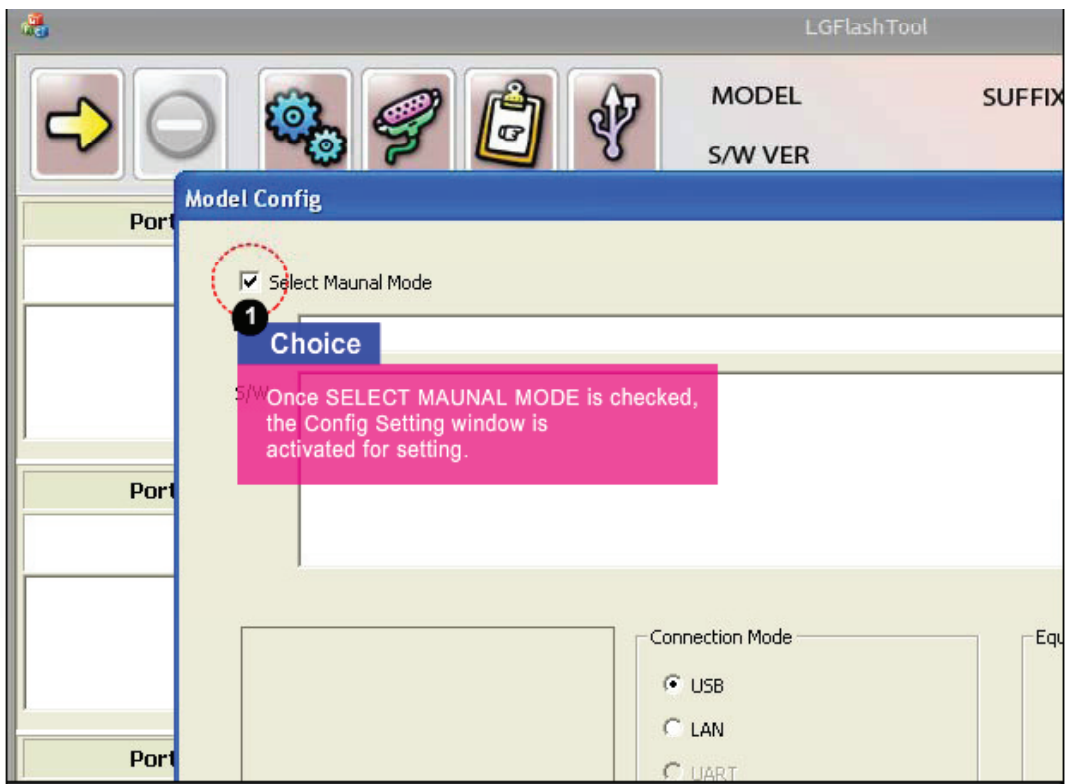
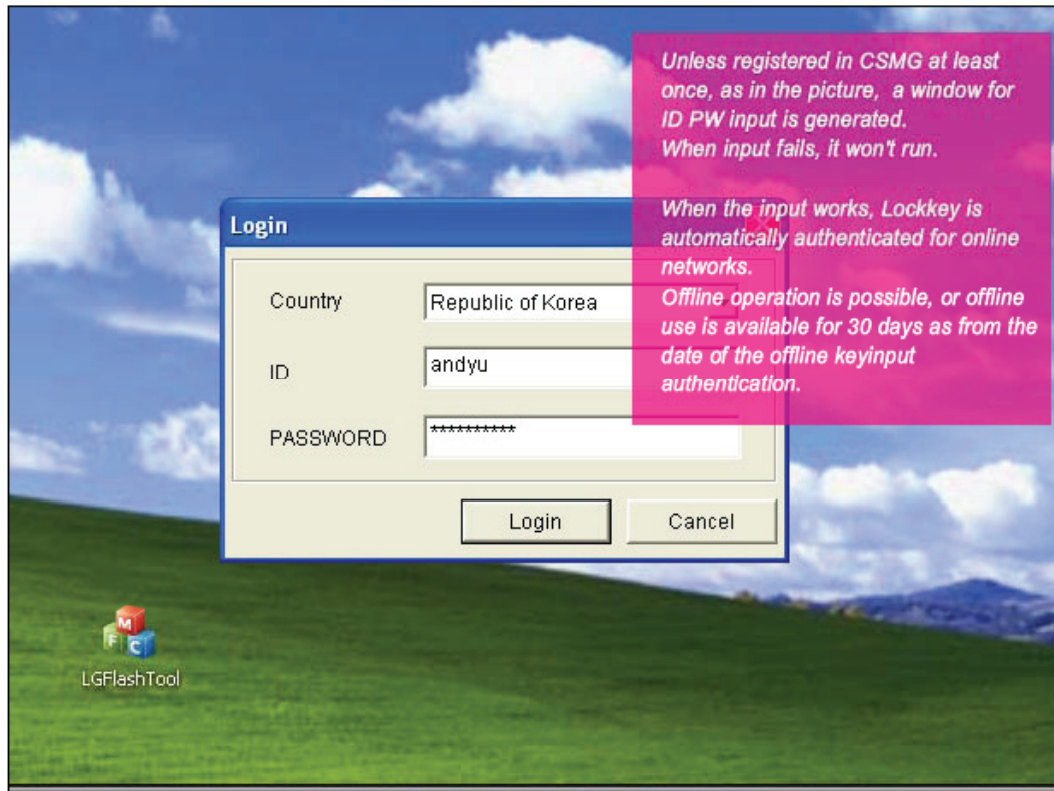




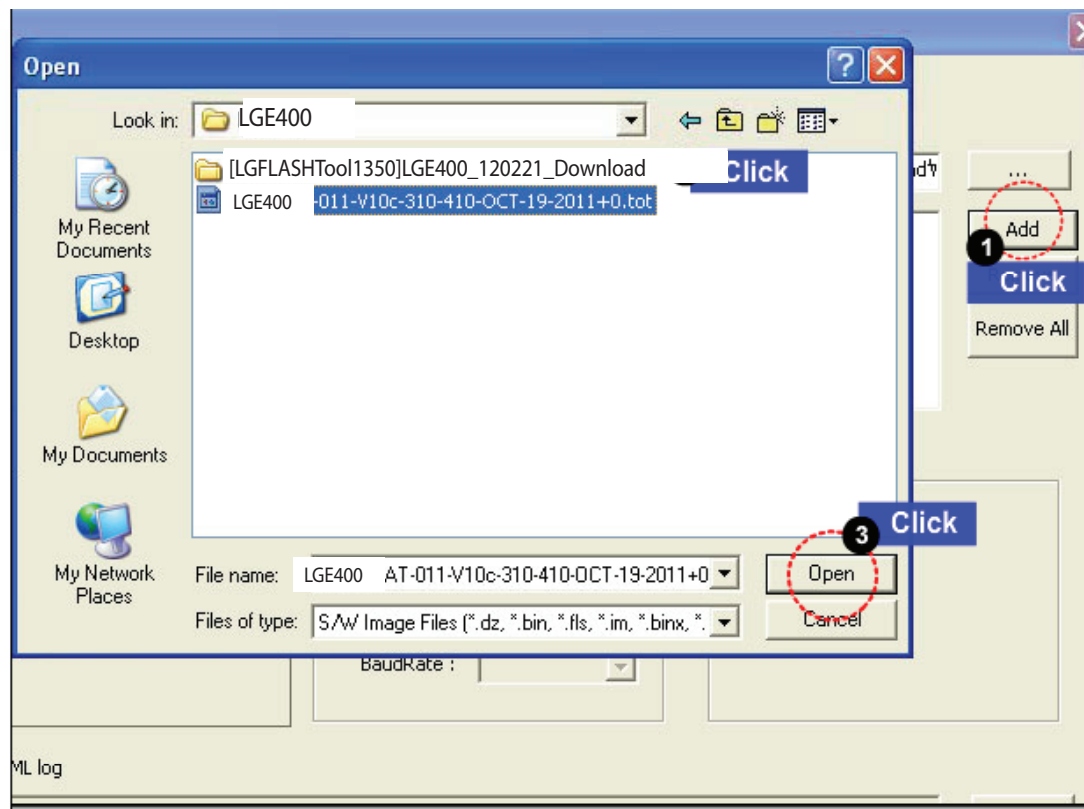
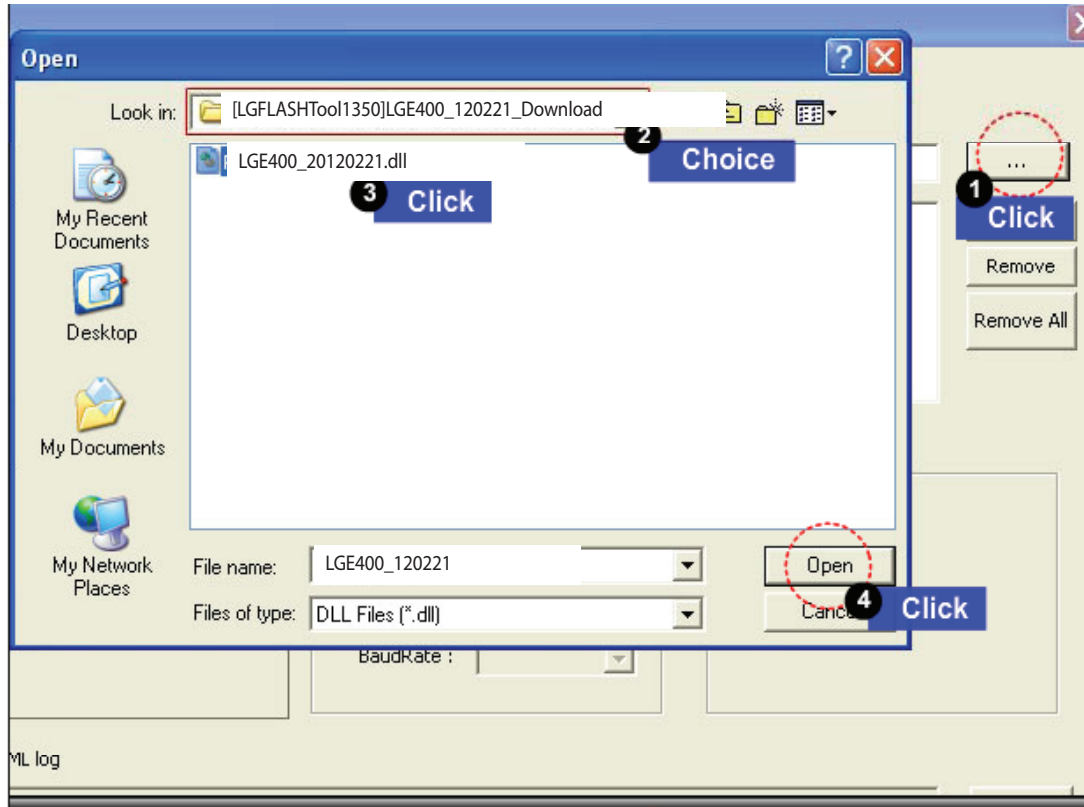
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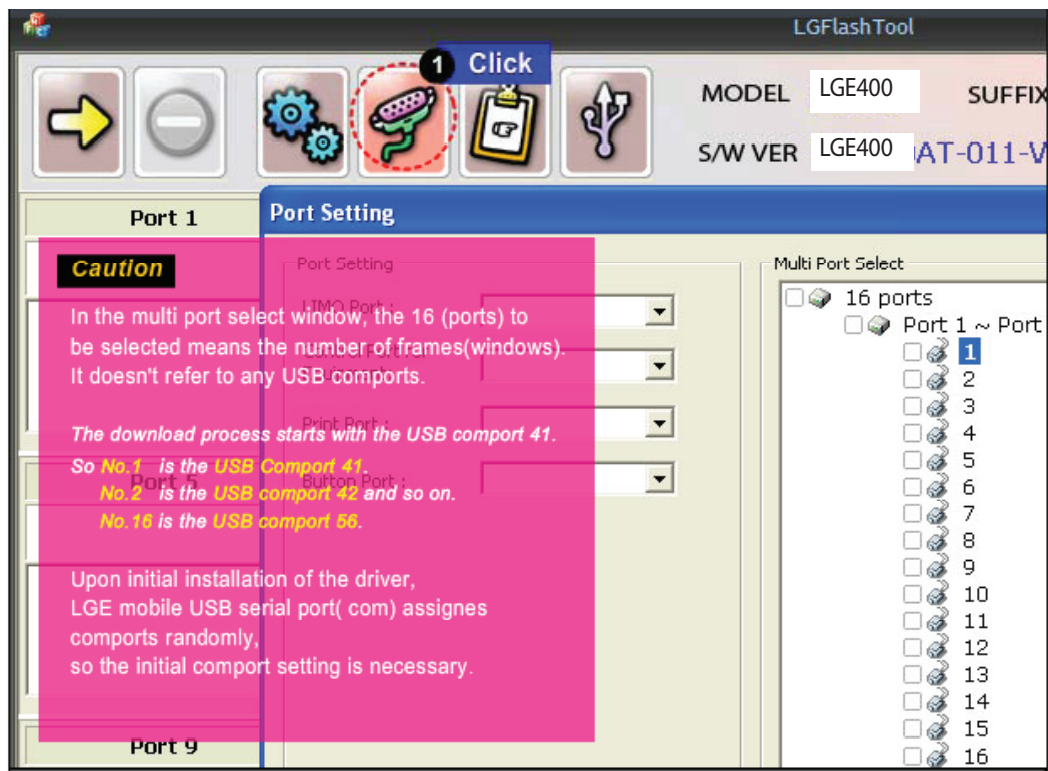
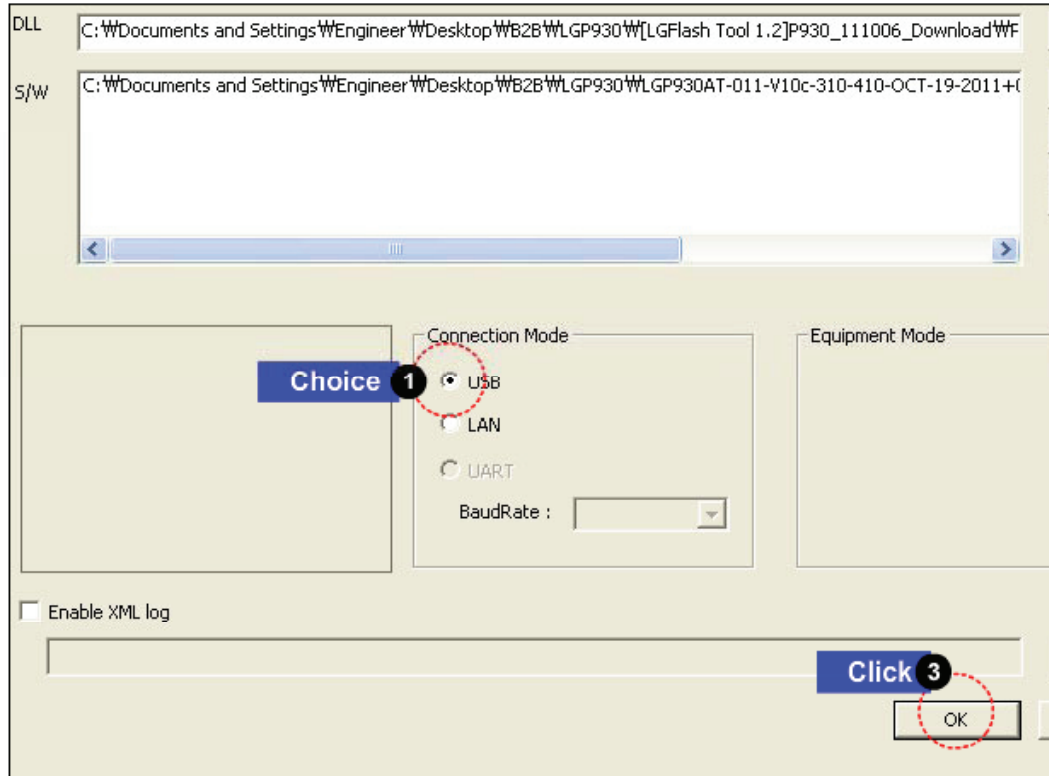
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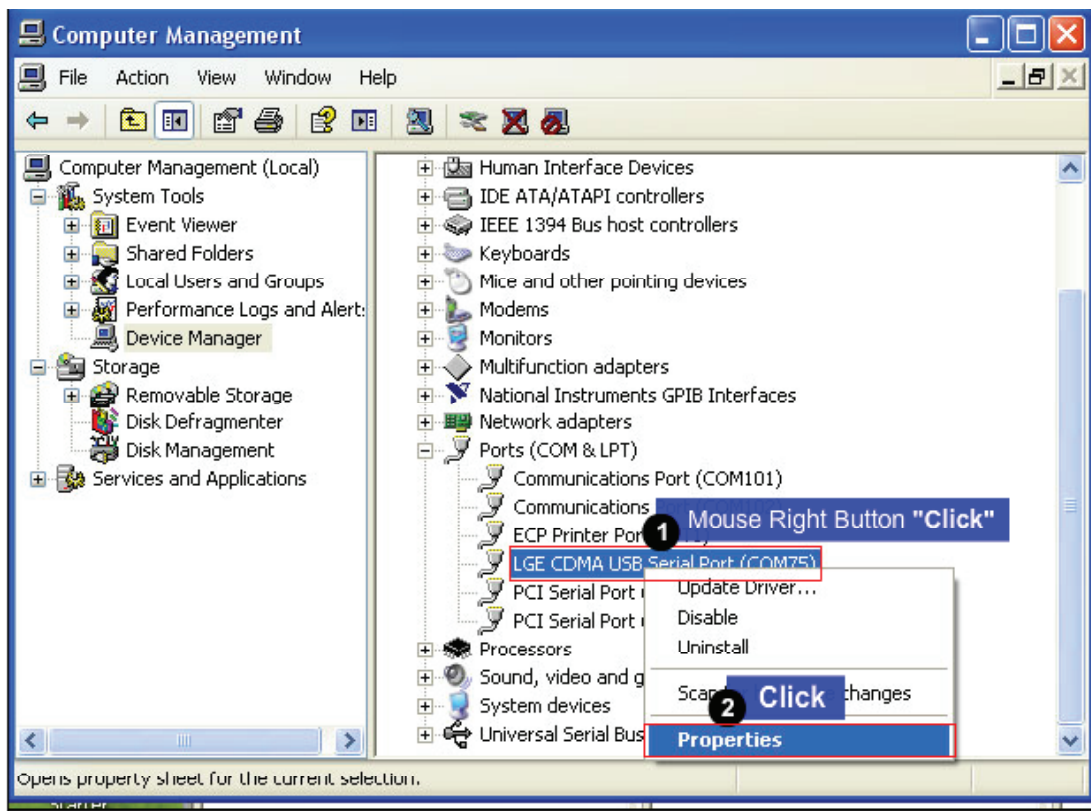
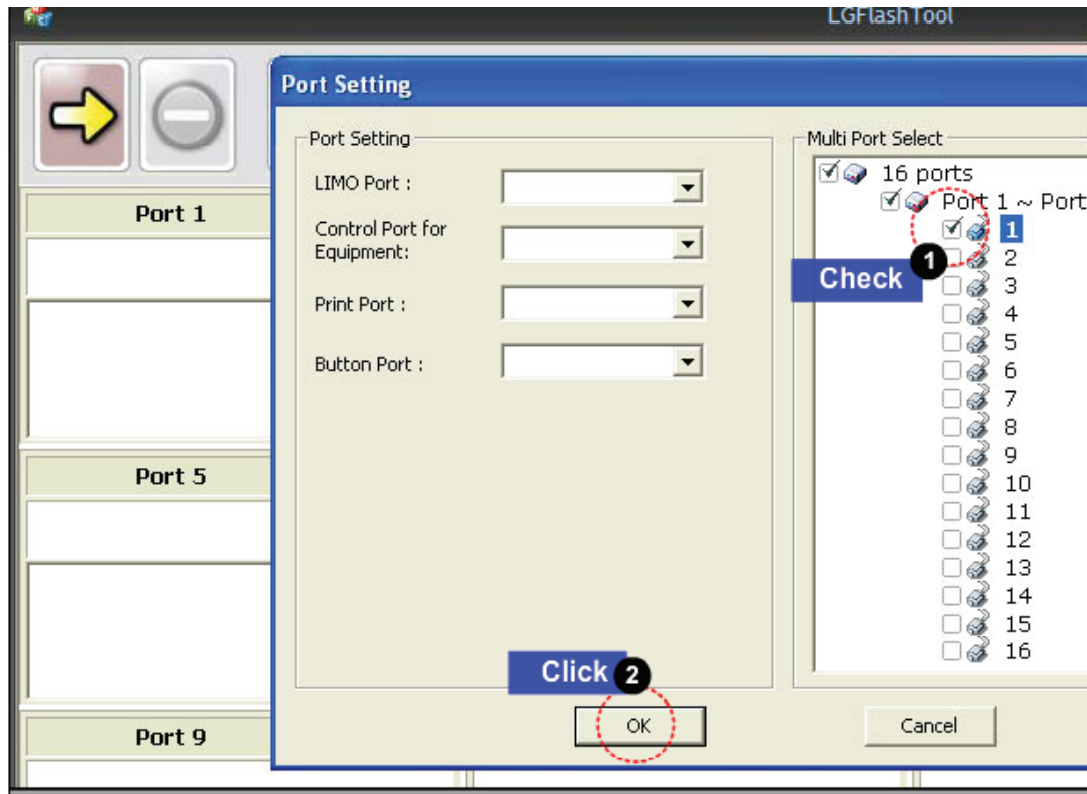
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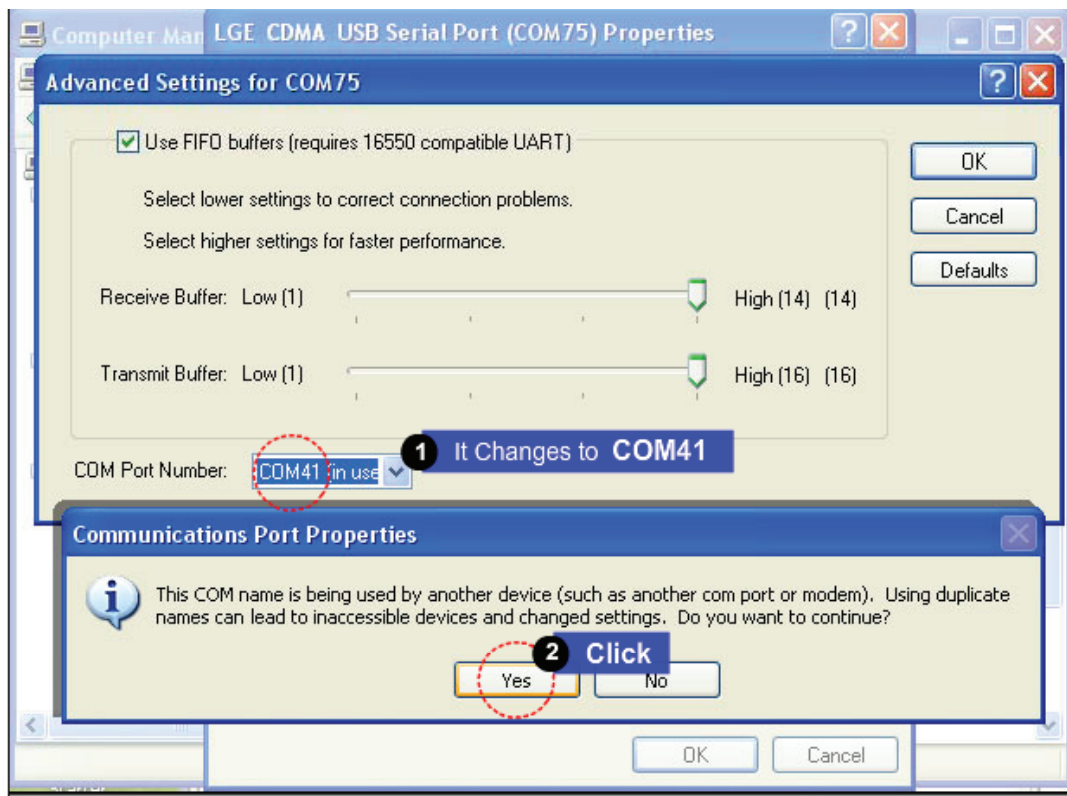
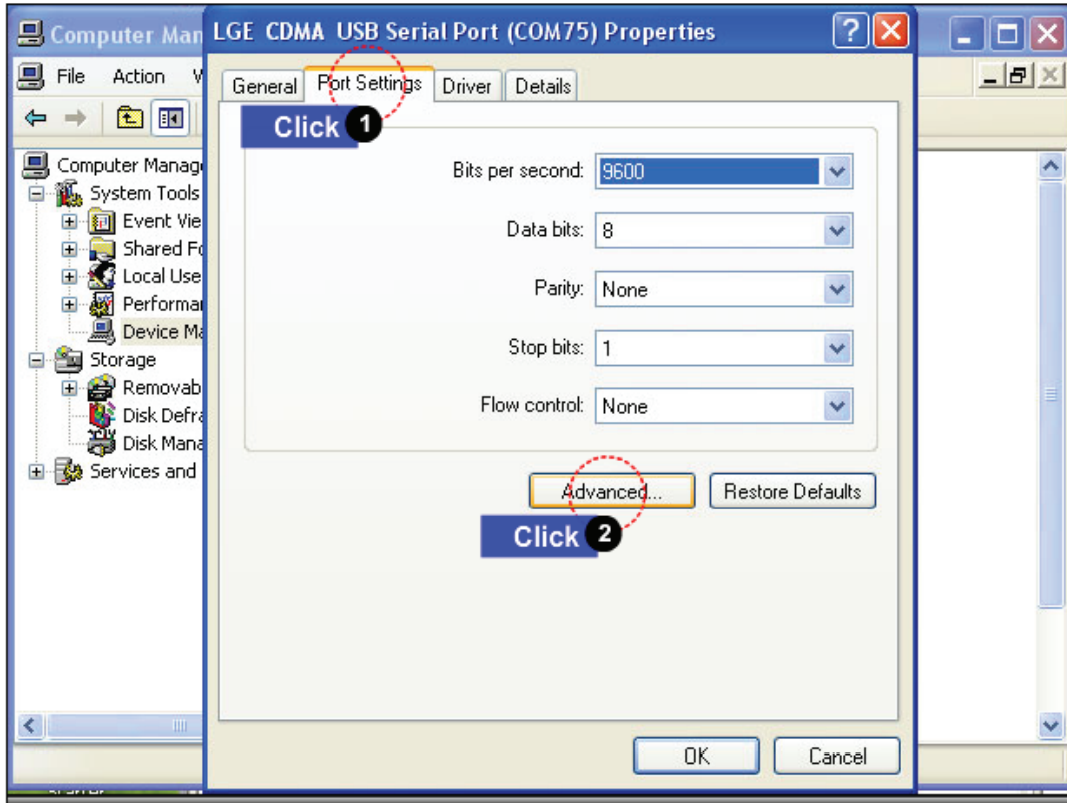


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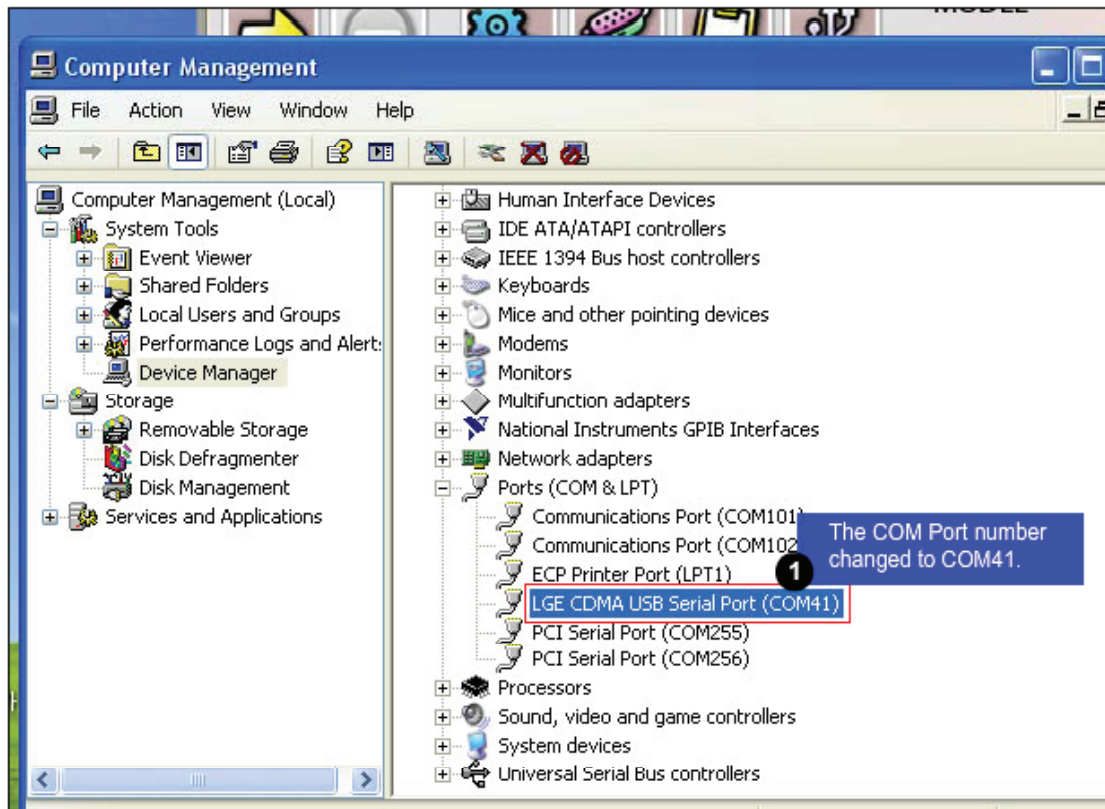
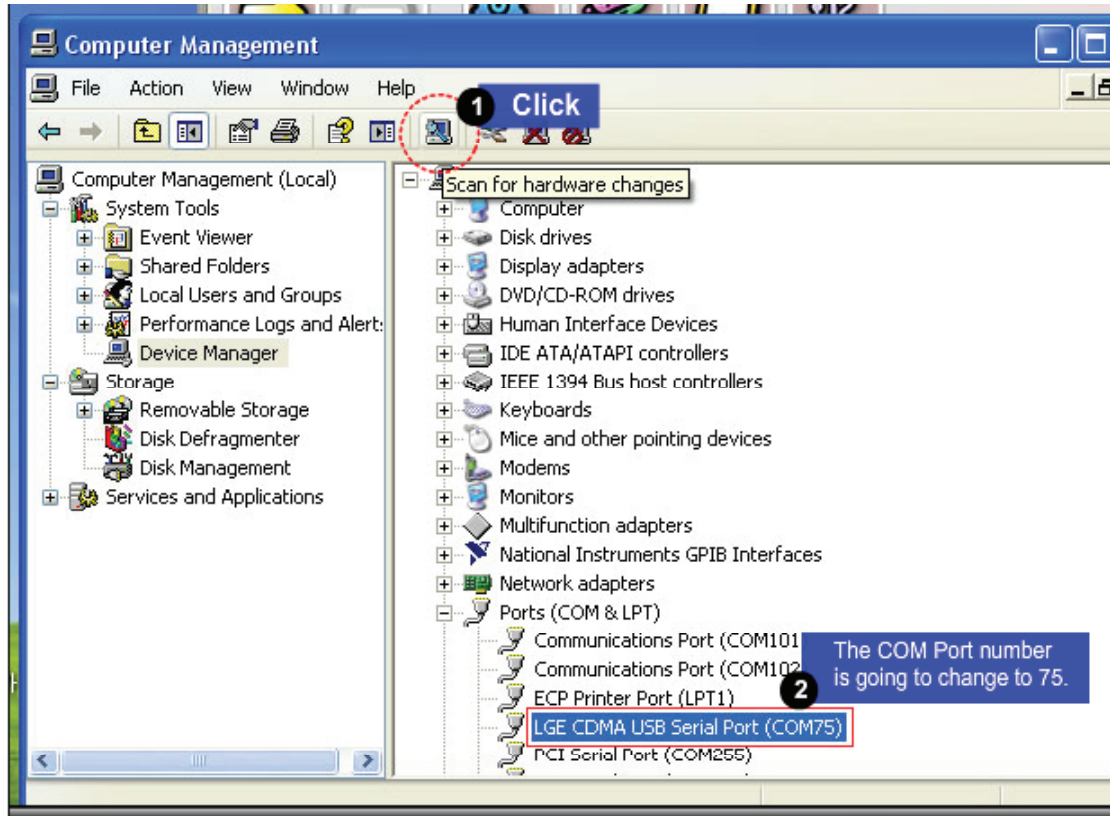


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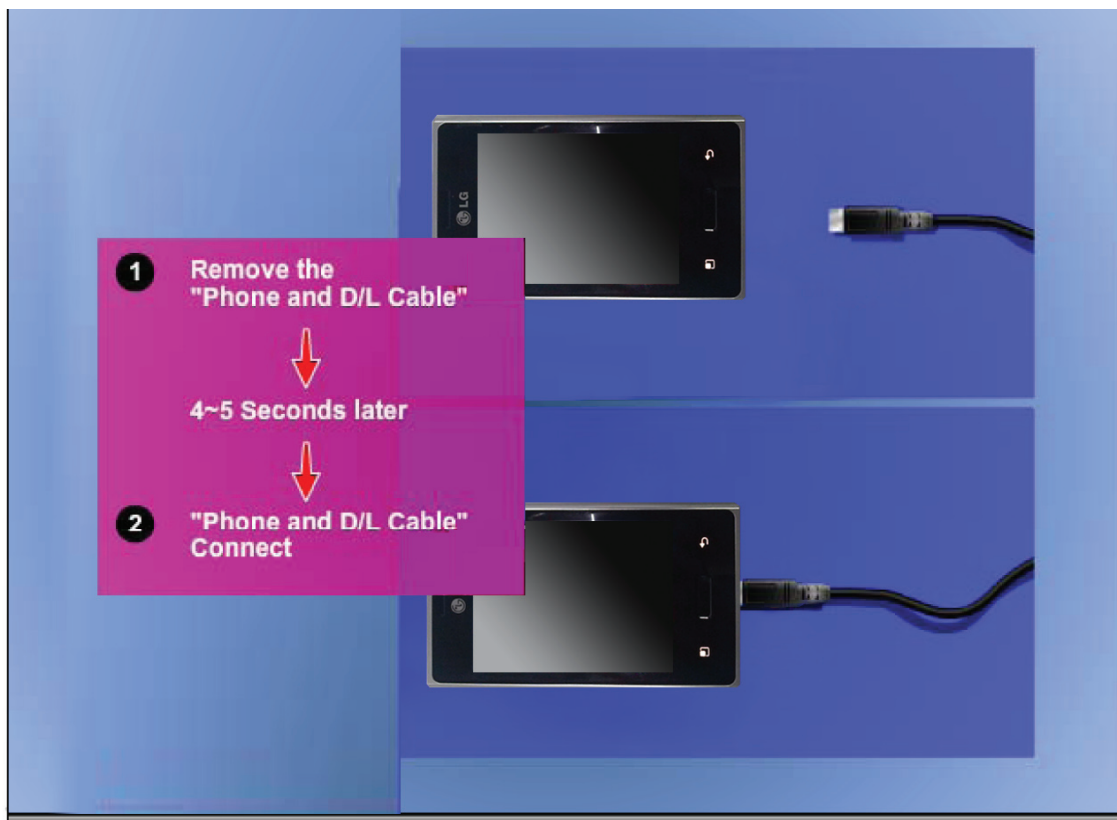
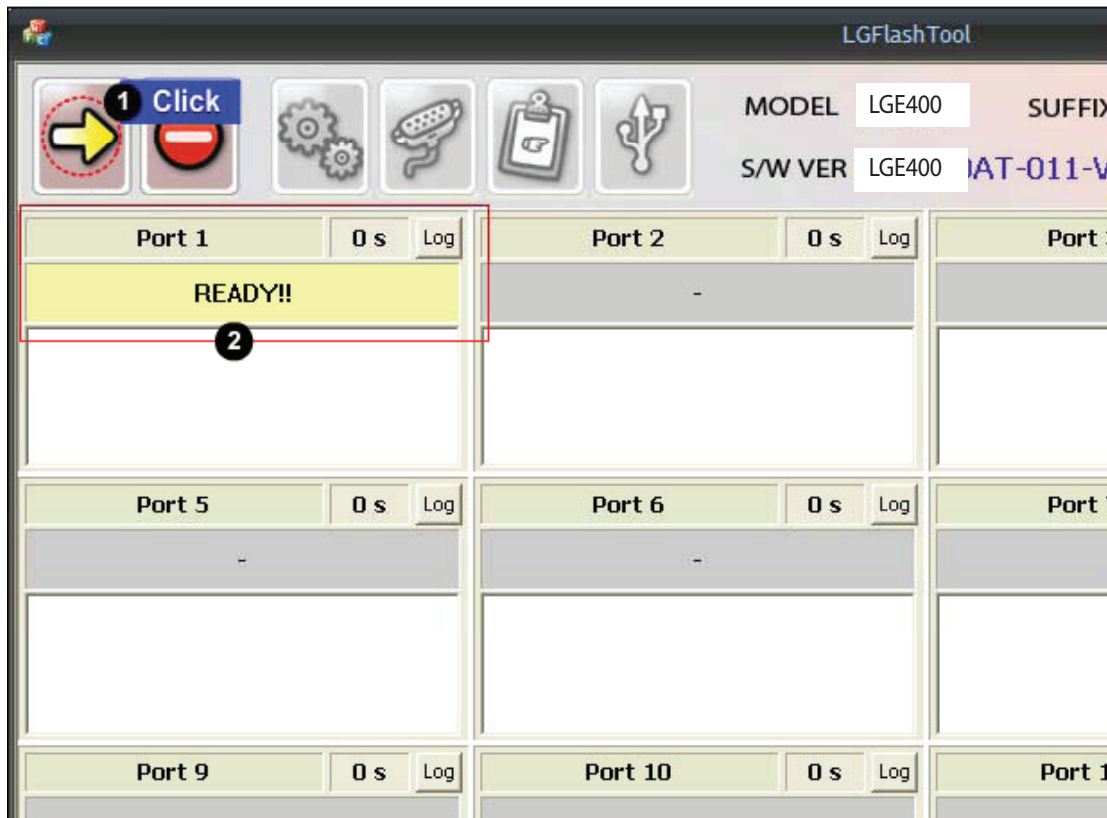




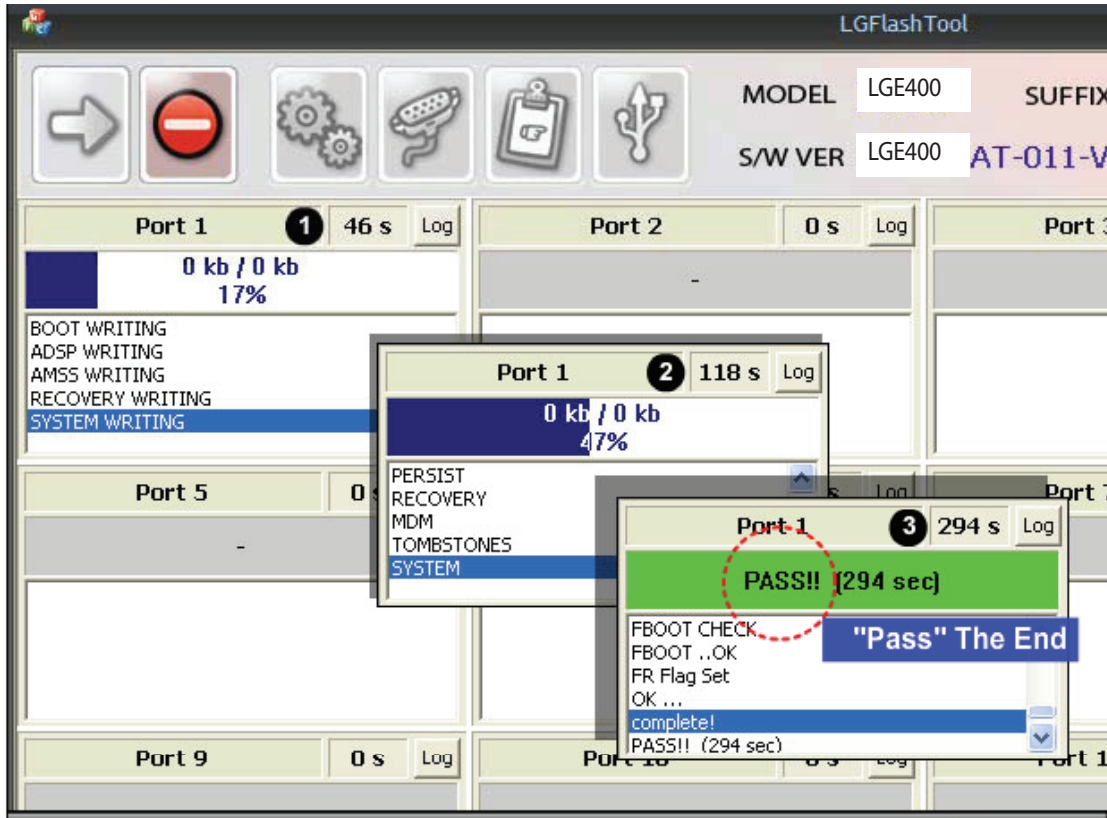
5. DOWNLOAD



5. DOWNLOAD

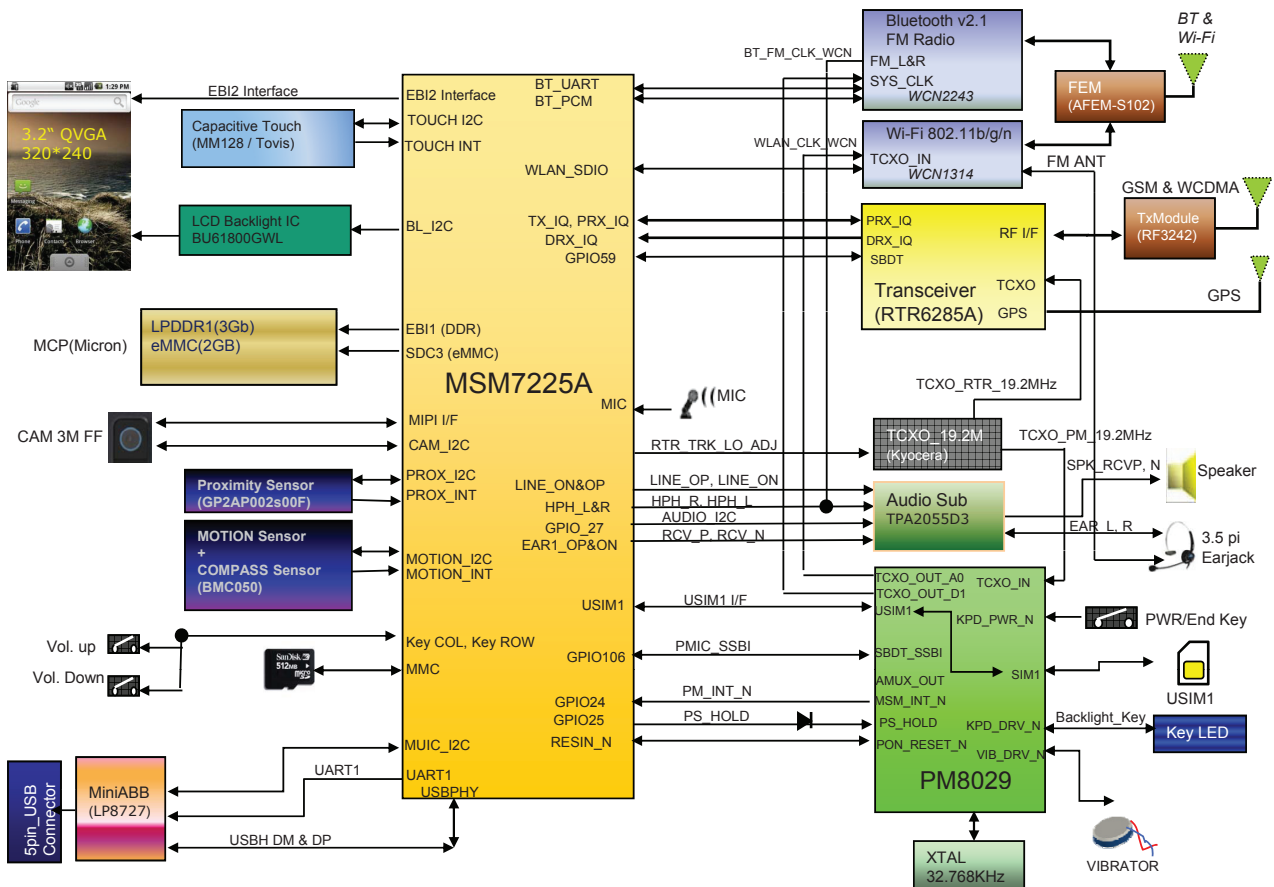


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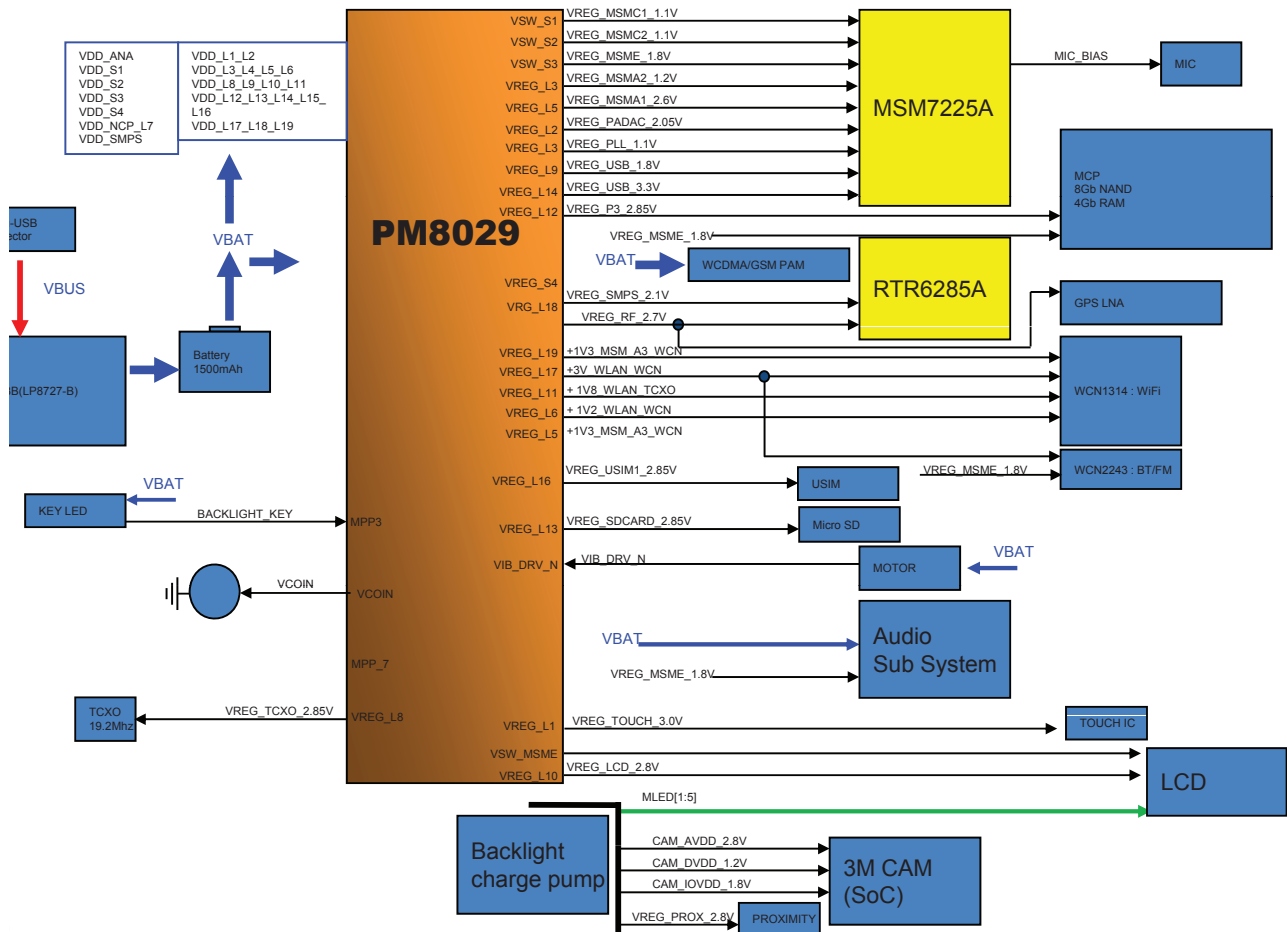
6. Block diagram

UNIVA(E400) Block Diagram _ TOTAL

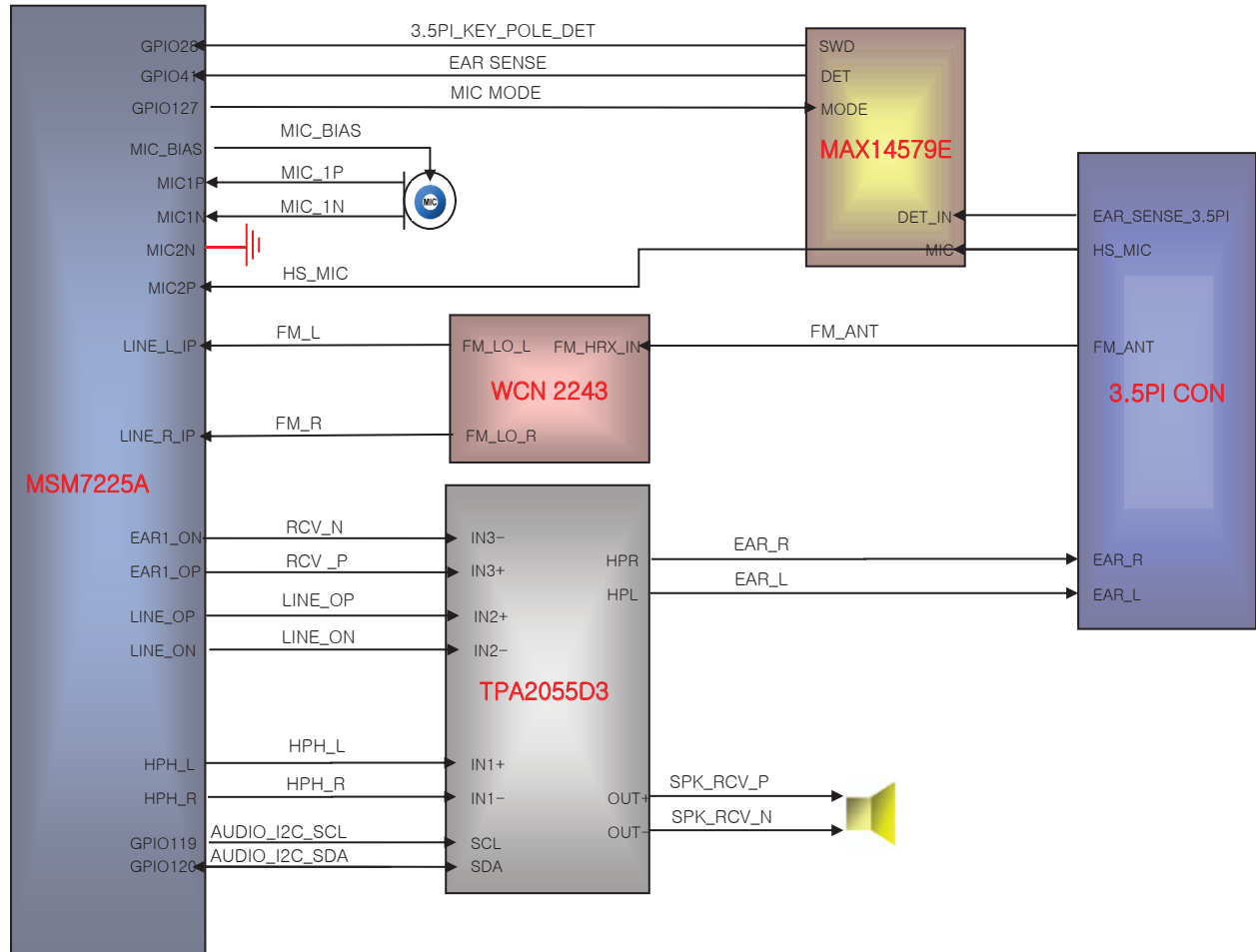


6. BLOCK DIAGRAM

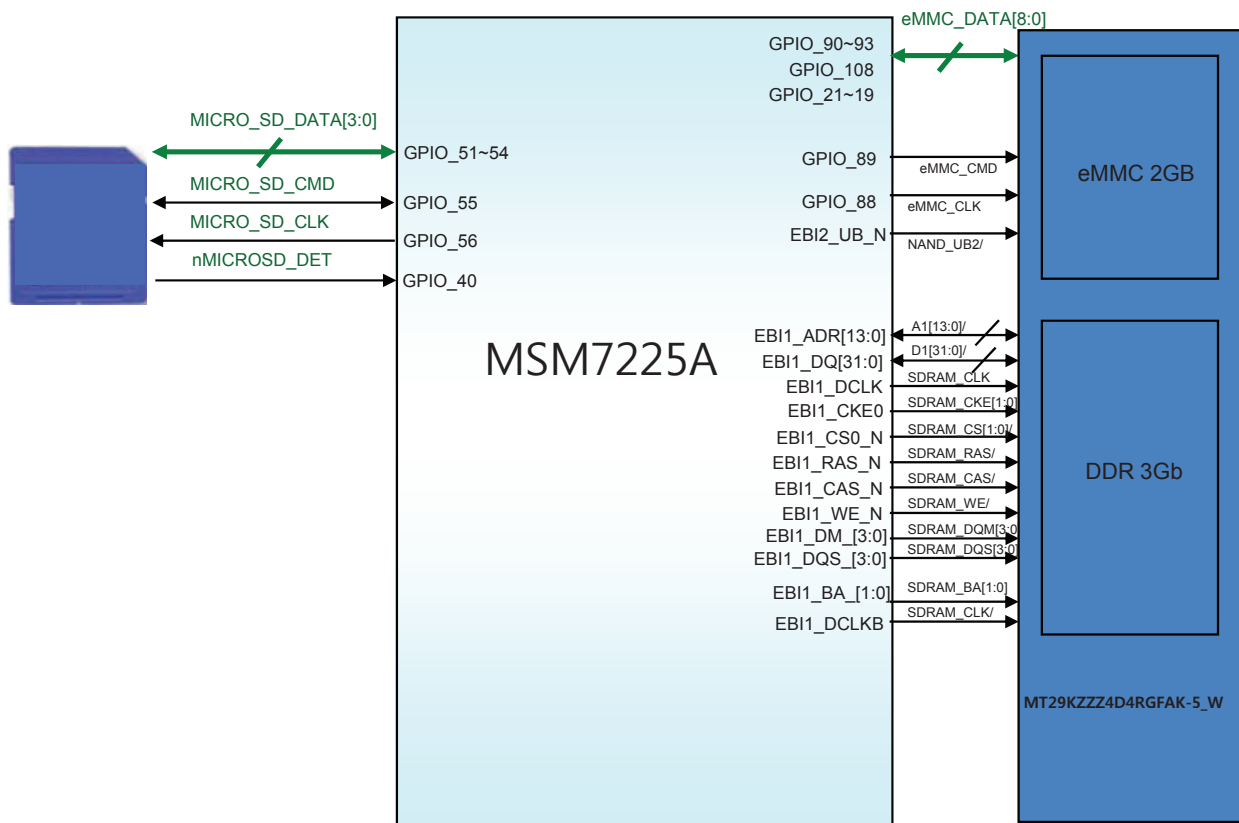
LGE400 Power Block Diagram



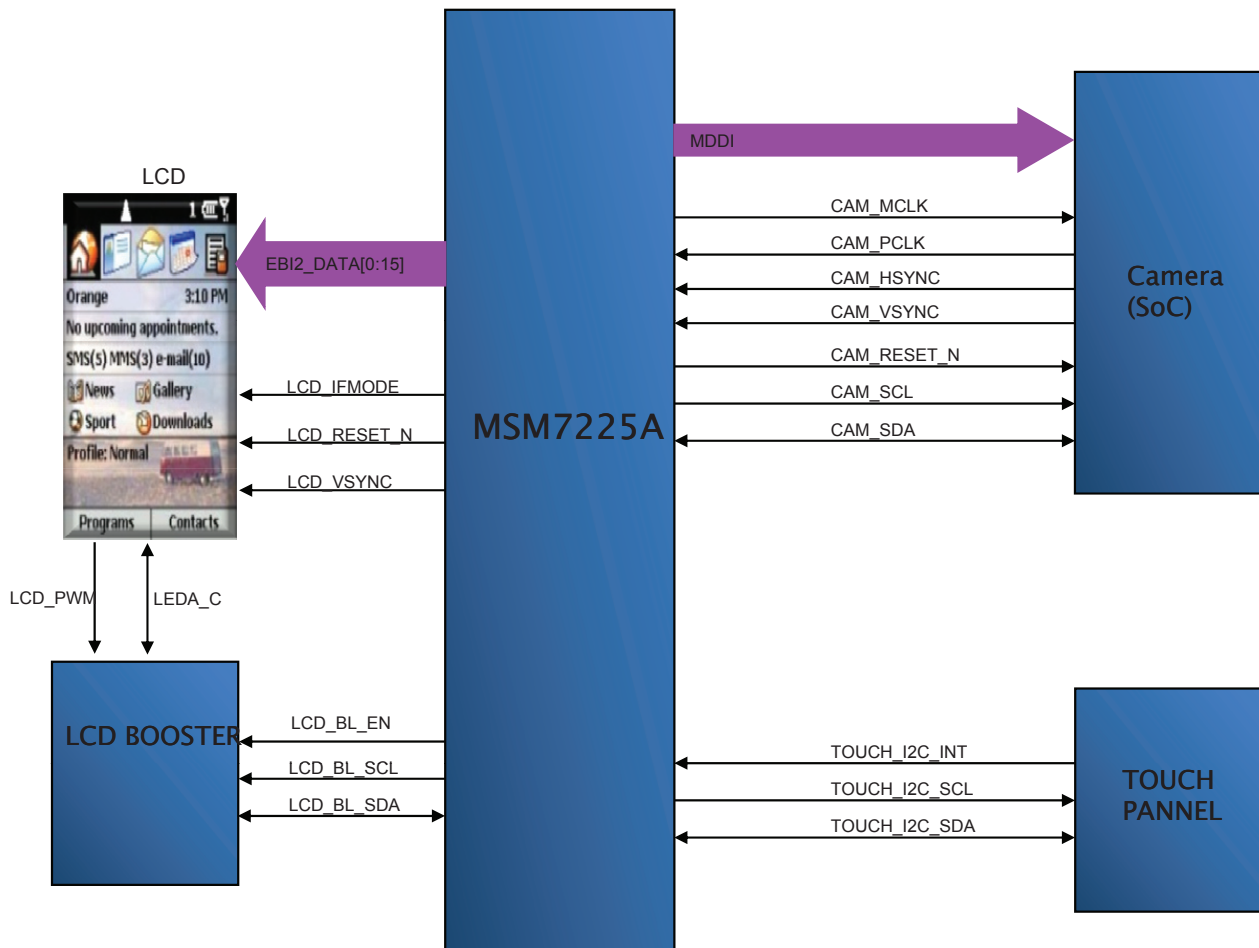
UNIVA(E400) Block Diagram _ Audio Block



LGE400 Memory Block Diagram

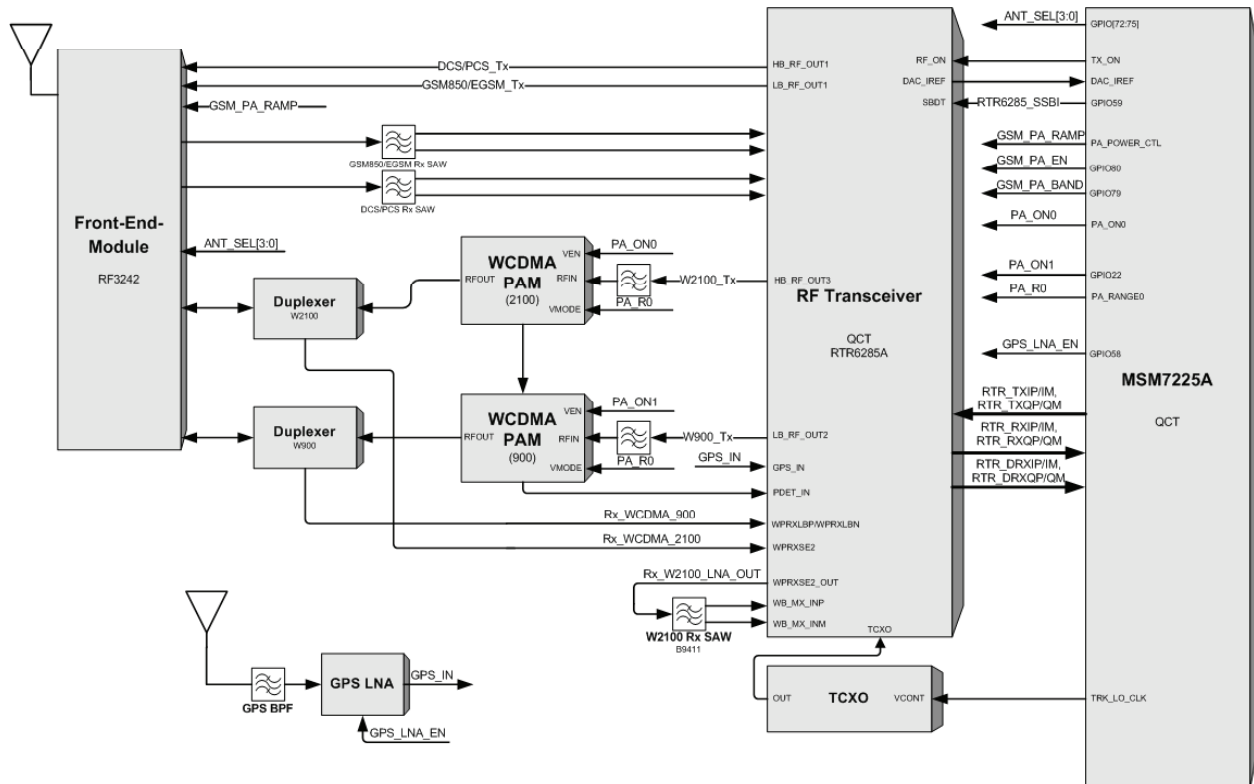


LGE400 LCD/Camera Block Diagram

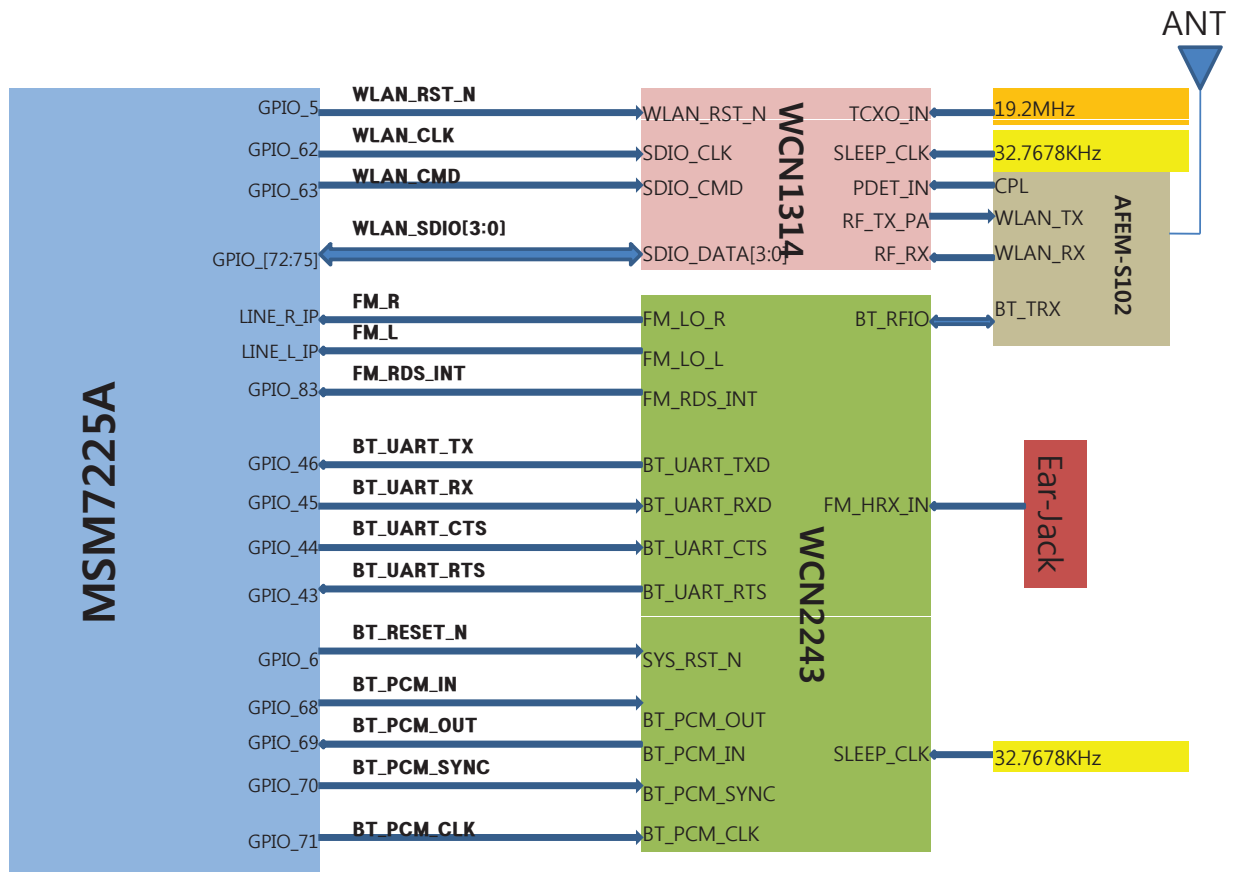


6. BLOCK DIAGRAM

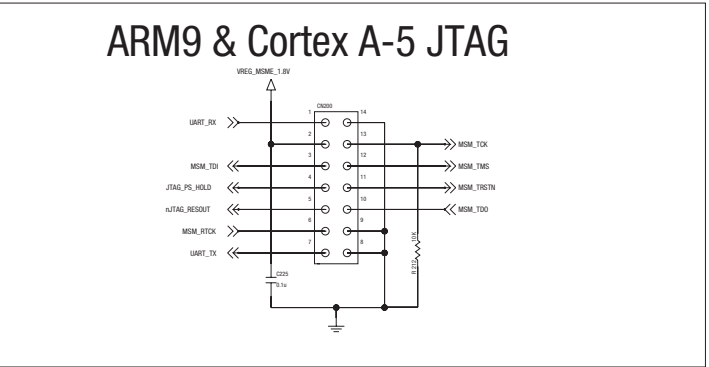
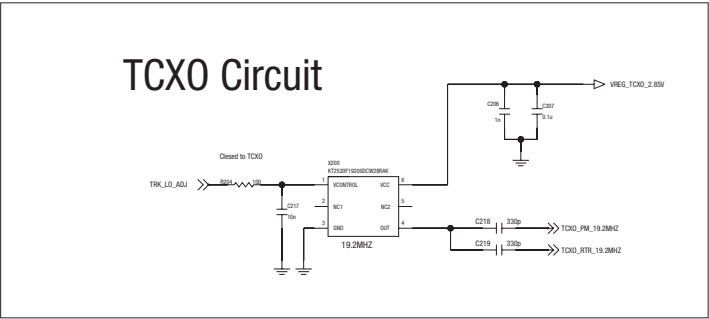
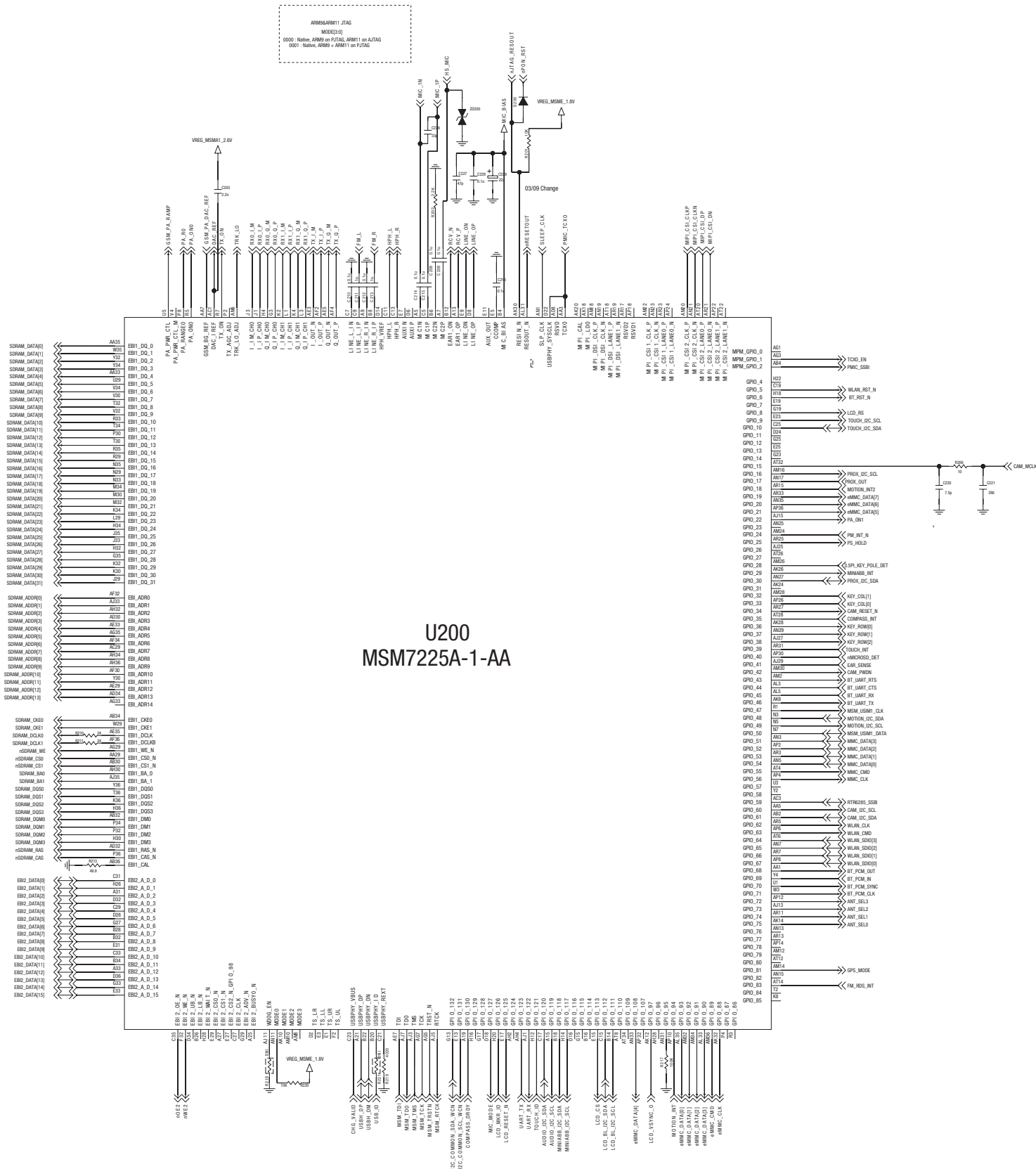
LGE400 RF Block Diagram



LGE400 BT/WLAN/FM Block Diagram



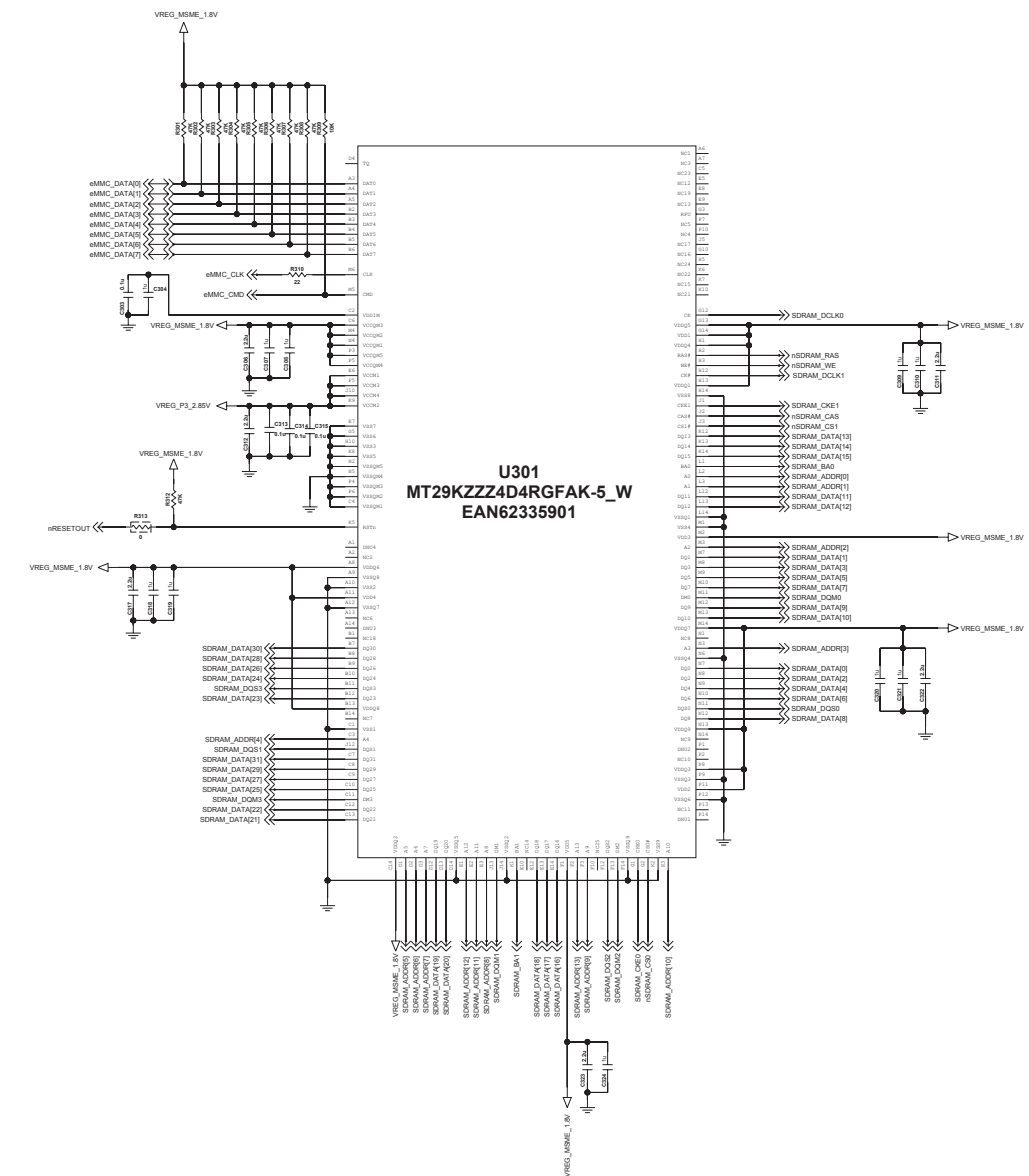
7. CIRCUIT DIAGRAM



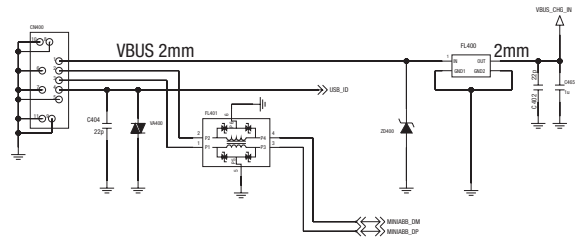
NEST JIG
Delete 11.05.19

Array TP
Delete 11.09.26

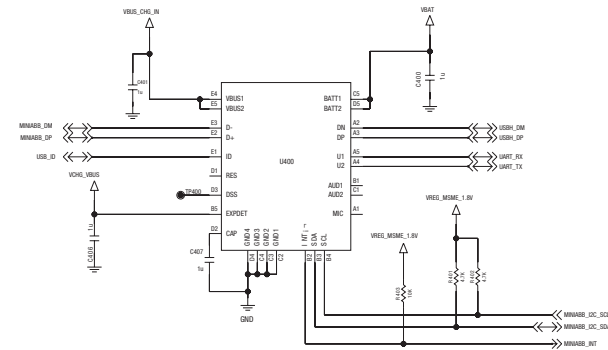
MCP (4GB eMMC +4Gb LPDDR1)
MICRON



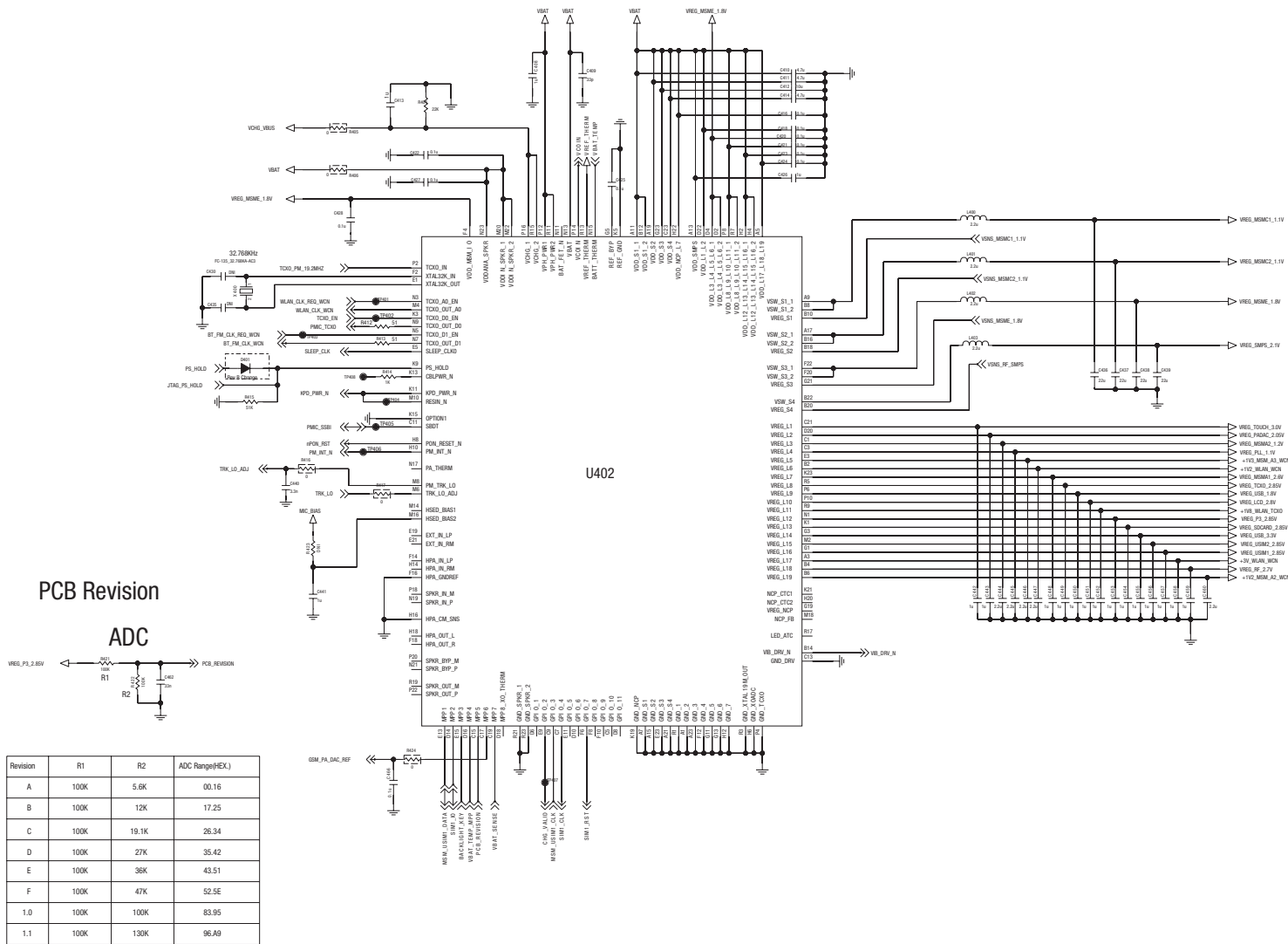
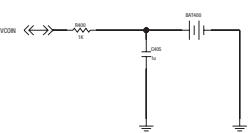
u-USB Connector



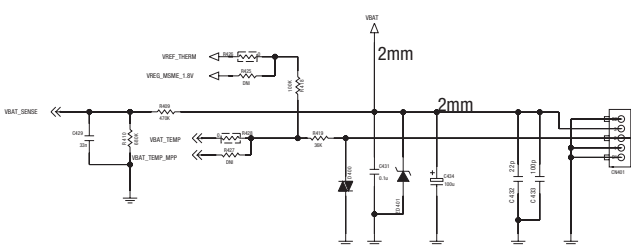
Mini ABB_NS



BACK-UP BATTERY

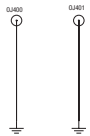


Battery Conn.



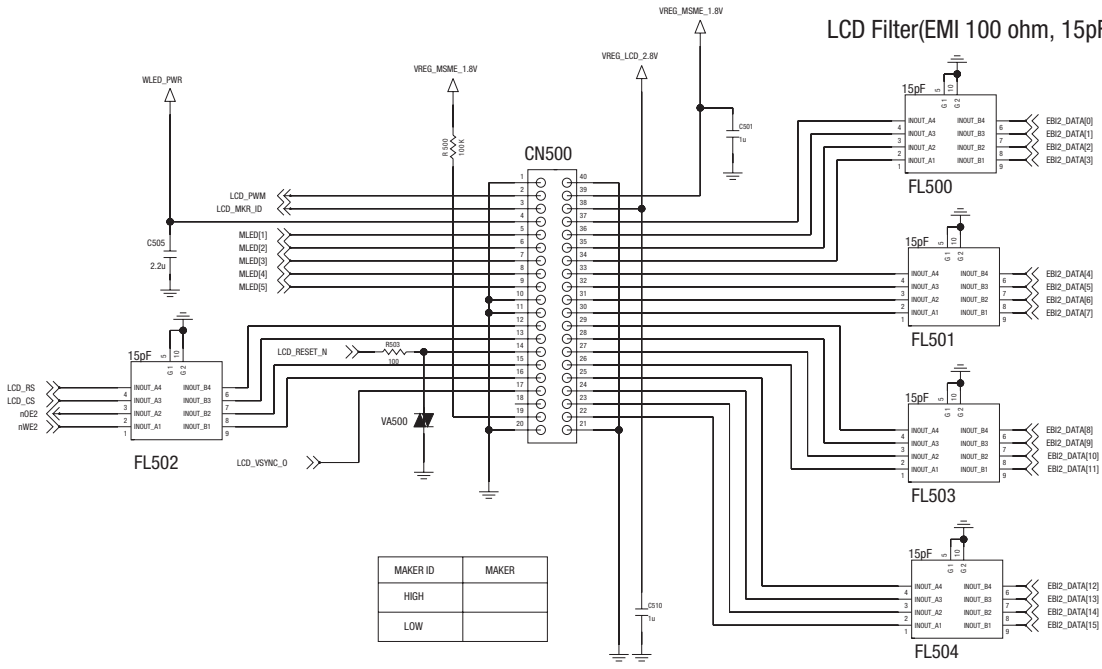
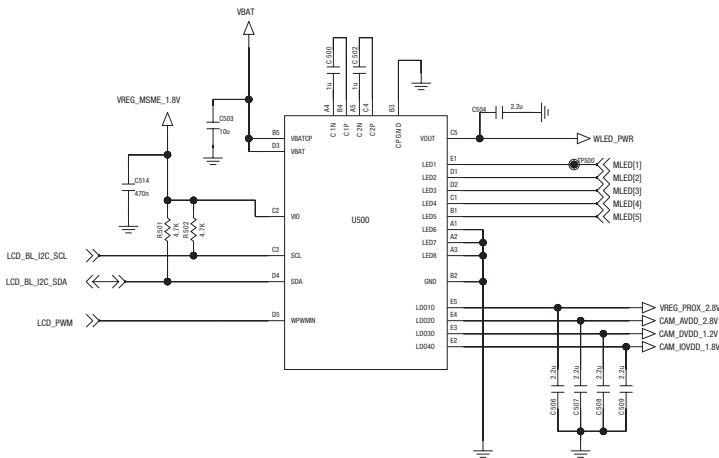
Must Check Battery Conn. Pin Map

Hole



Must Check Pinmap!!

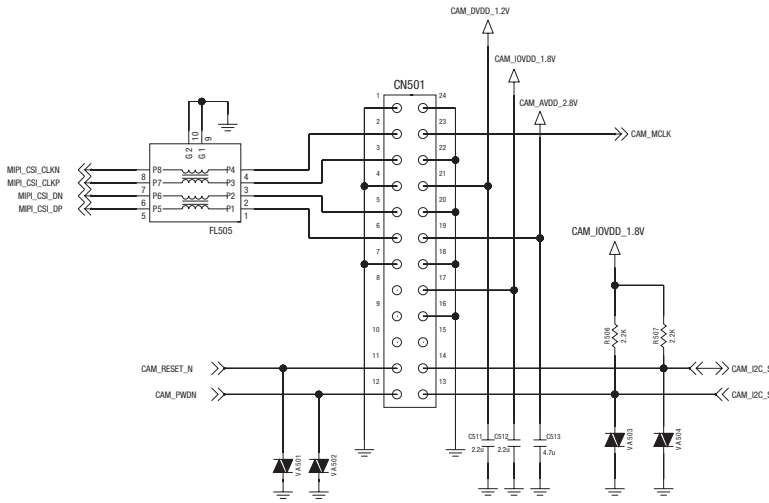
BACKLIGHT CHARGE PUMP



MAKER ID	MAKER
HIGH	
LOW	

3M CAMERA

Must Check Pinmap!!

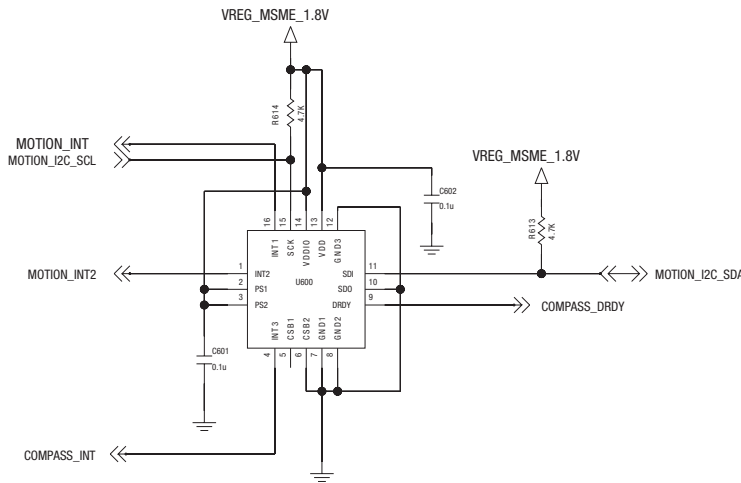


Digital Compass

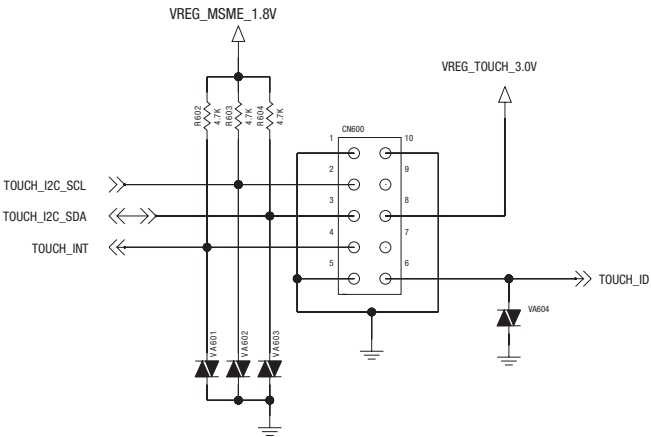
Delete 8.19



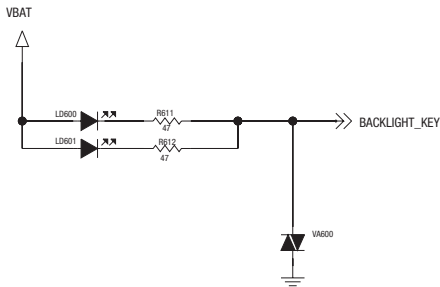
Accelerometer sensor



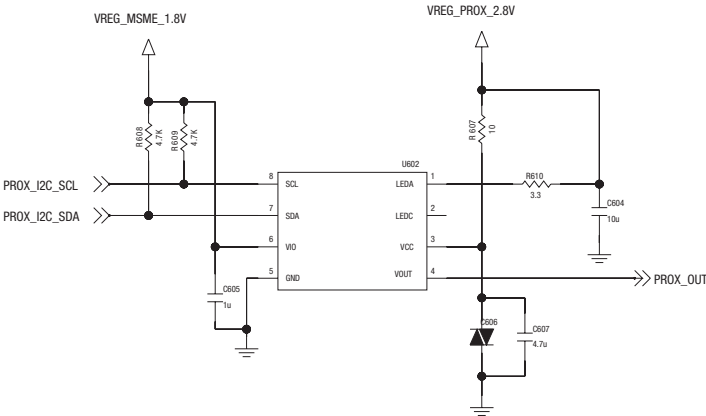
TOUCH



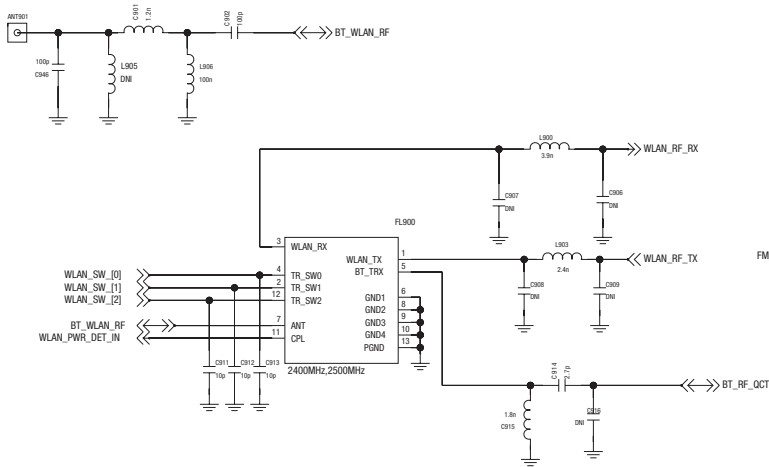
KEY BACKLIGHT LED



Proximity sensor



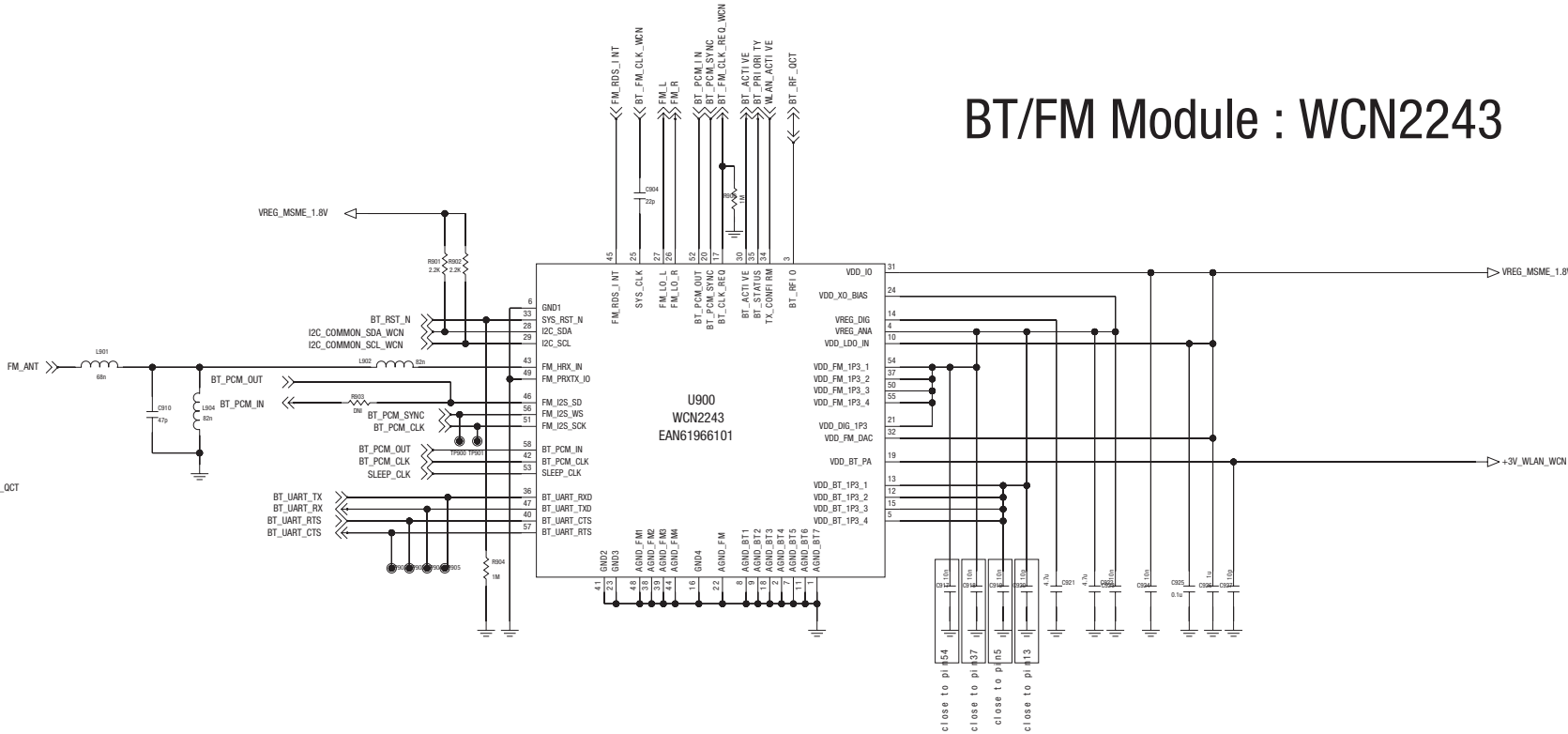
BT/WI-FI FRONT-END



ANTENNA SWITCH MODULE LOGIC

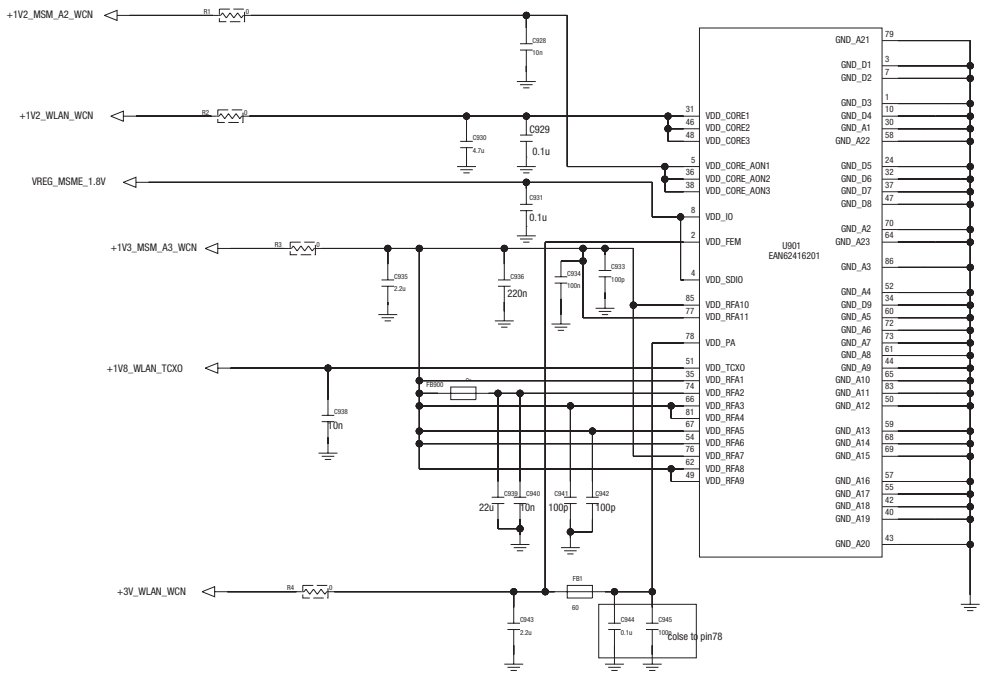
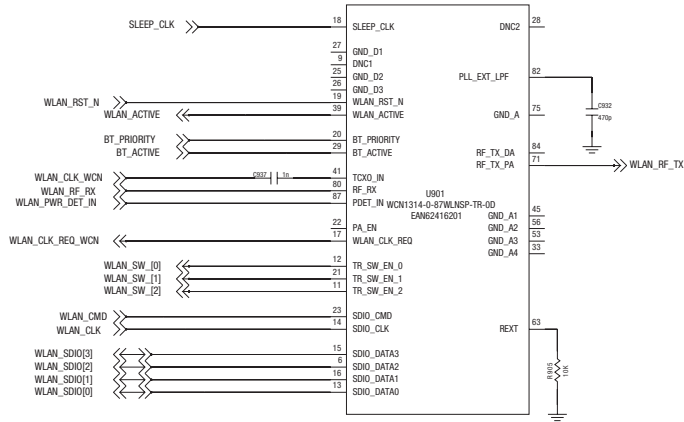
	SW0	SW1	SW2
WiFi RX-ANT	HIGH	LOW	LOW
WiFi TX-ANT	LOW	HIGH	LOW
BT-ANT	LOW	LOW	HIGH

BT/FM Module : WCN2243



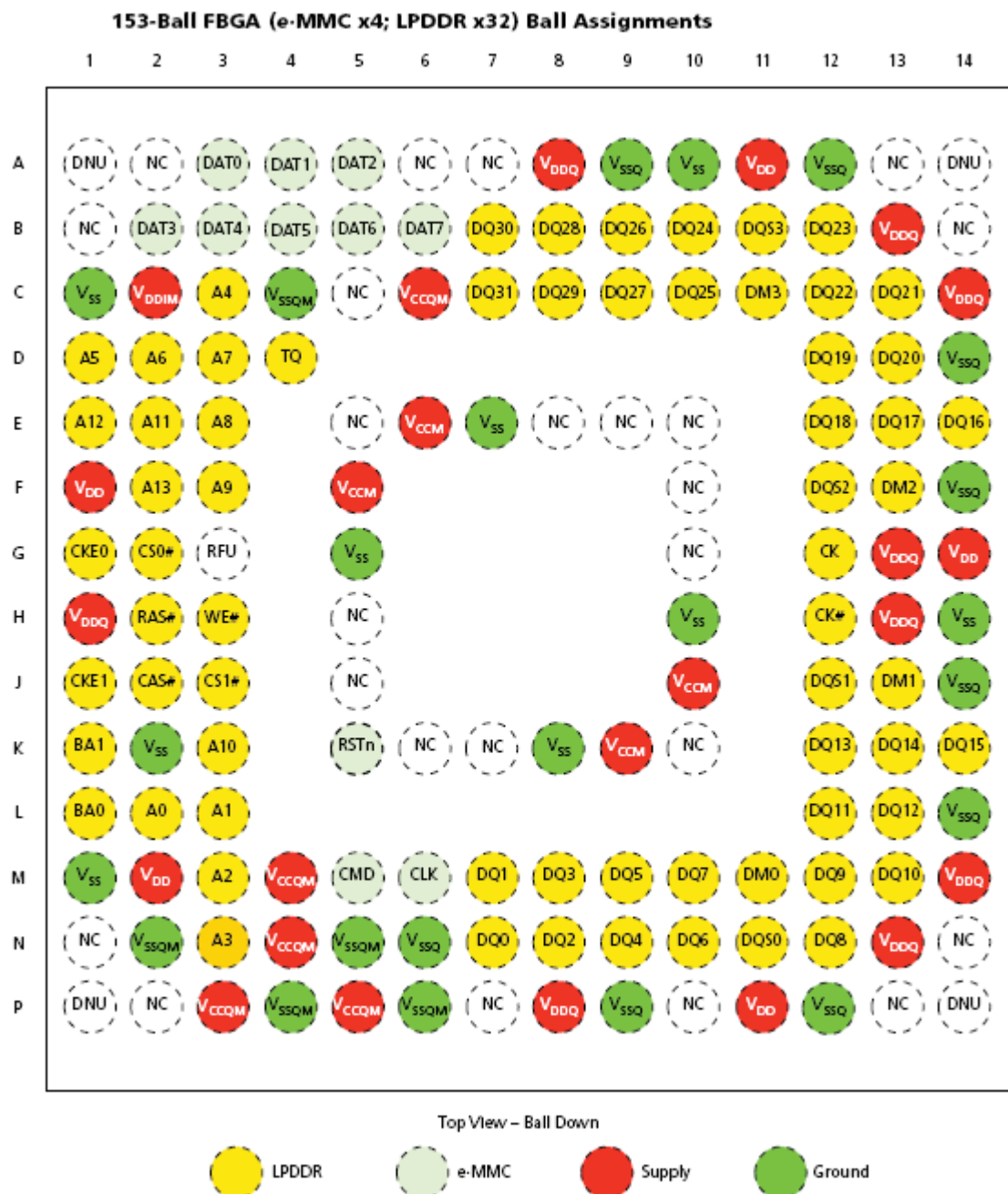
WiFi : WCN 1314

Wi-Fi : WCN1314



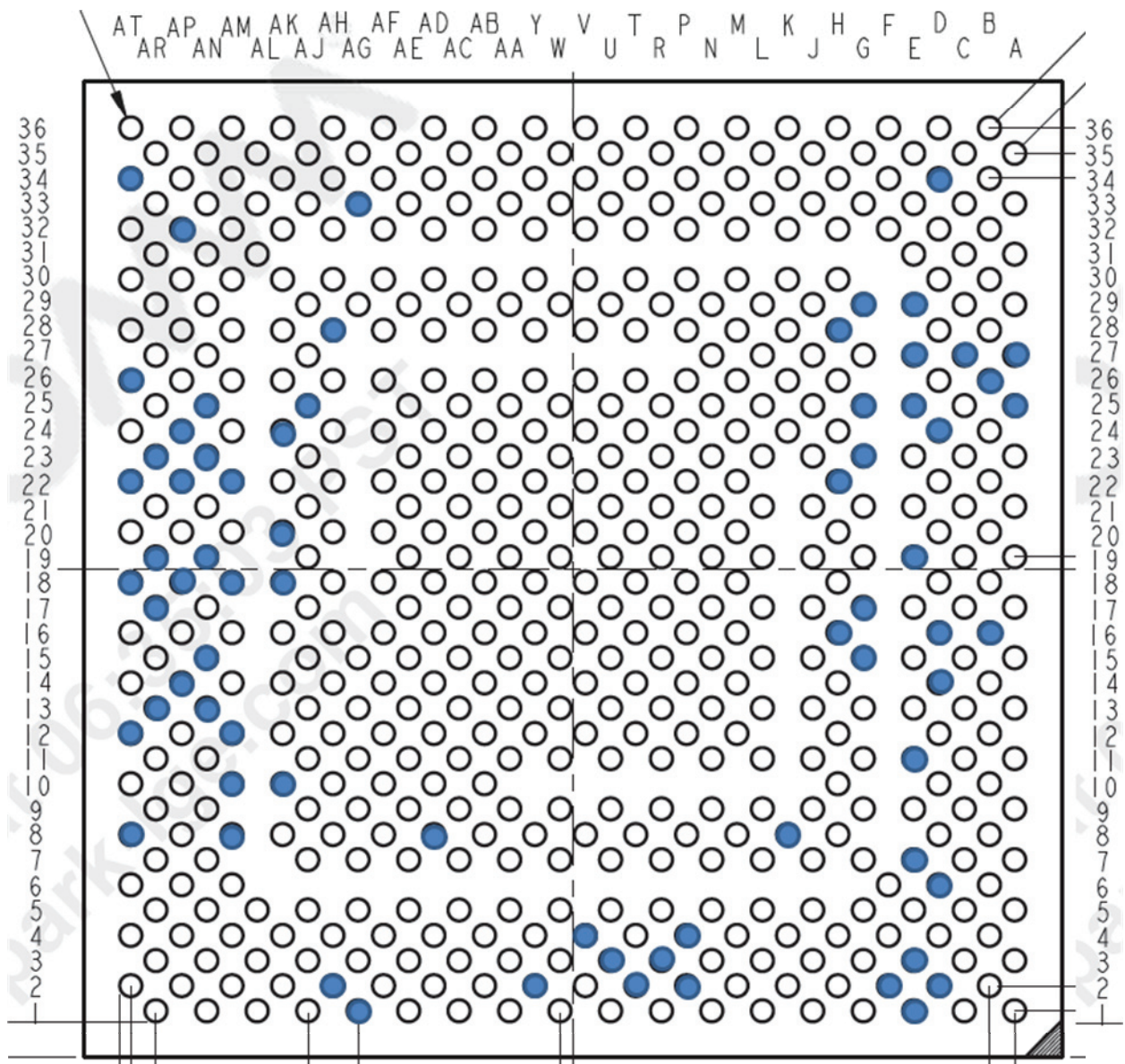
8. BGA PIN MAP

U301 - Memory MCP (Top View)



8. BGA PIN MAP

U200 - MSM7225A (Bottom View)

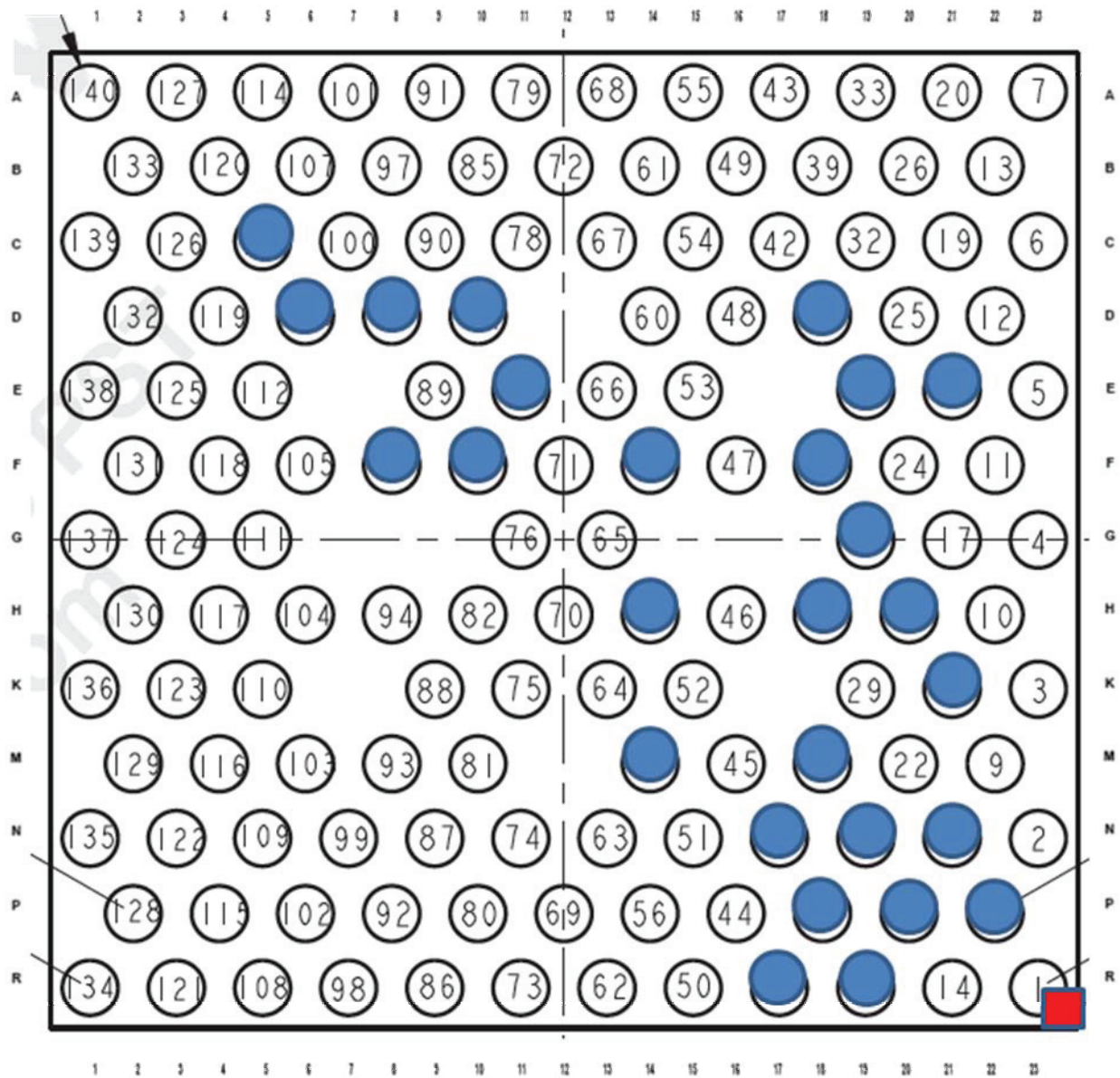


○ USE

● NOT IN USE

8. BGA PIN MAP

U402 - PM8029 (Bottom View)







○ USE

● NOT IN USE

8. BGA PIN MAP

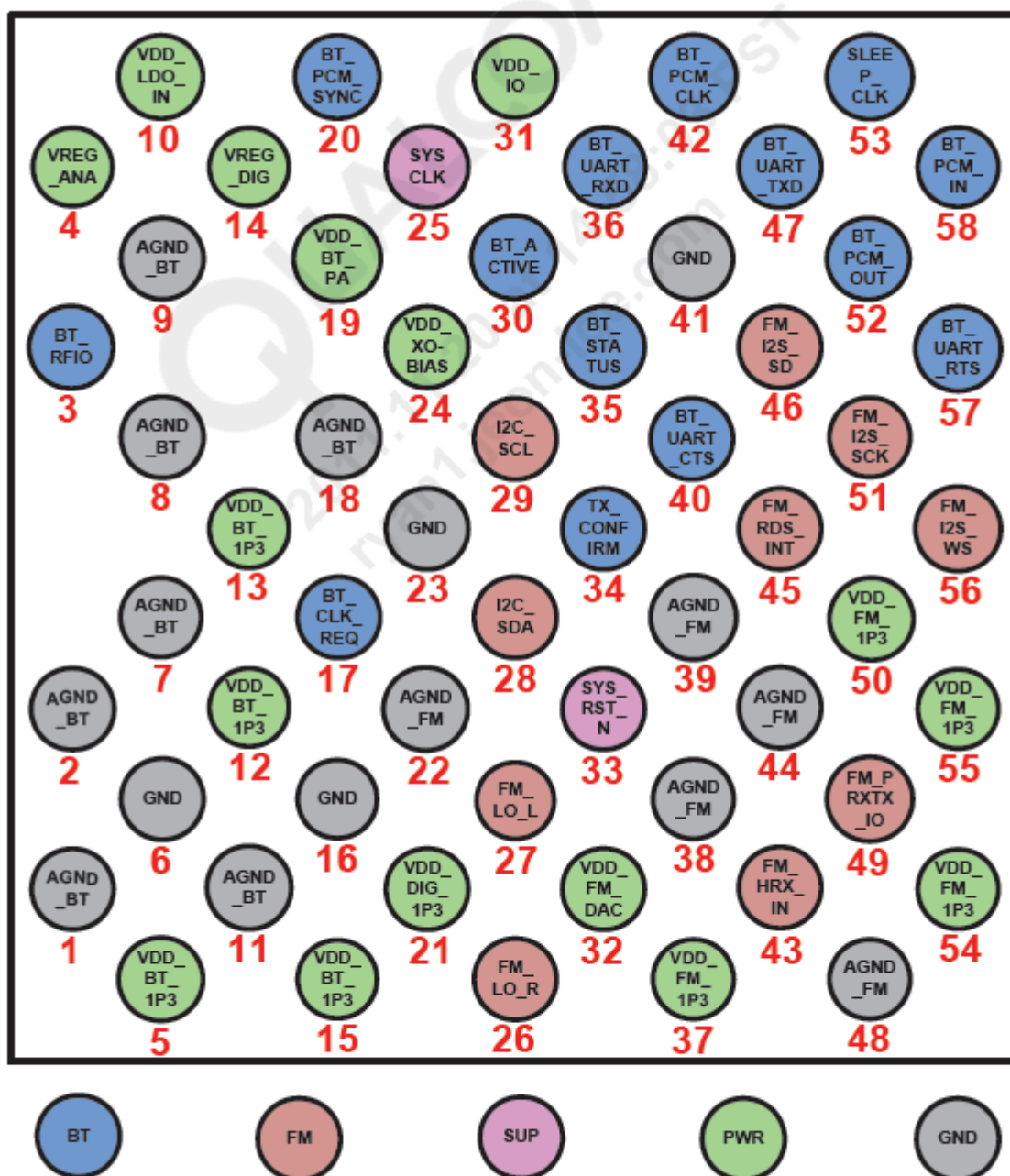
U100 - RTR6285A (Top View)

	1	2	3	4	5	6	7	8	9	10	11	12	13	
A	GND	TX_RBIAS	DAC_IREF	TX_IP	VDDA2	VDDA2	HB_RF_O UT3	HB_RF_O UT2	HB_RF_O UT1	LB_RF_OU T1	VDDA1	PDET_IN	GND	A
B	VDDA2	GND	TX_QP	TX_QN	TX_IN	VDDA2	GND	GND	LB_RF_OU T2	VDDA2	GND	EGSM_INN	GCELL_IN N	B
C	TCXO	GND										EGSM_INP	GCELL_IN P	C
D	VDDA1	VDDA1		GND	GND	GND	GND	GND	GND	GND		GPCS_INN	DCS_INN	D
E	VTUNE1	GND		GND	GND	GND	GND	GND	GND	GND		GPCS_INP	DCS_INP	E
F	VDDA1	VDDA2		GND	GND	GND	GND	GND	GND	GND		GND	VDDA2	F
G	VTUNE_G PS	VDDA2		GND	GND	GND	GND	GND	GND	GND		GND	GPS_IN	G
H	VDDA1	VDDA1		GND	GND	GND	GND	GND	GND	GND		GND		H
J	PRX_QP	PRX_QN		GND	GND	GND	GND	GND	GND	GND		 1	 2	J
K	PRX_IN	PRX_IP		GND	GND	GND	GND	GND	GND	GND		GND	WPRXSE1	K
L	DRX_QP	DRX_QN										VDDA2	WPRXSE2	L
M	DRX_IP	DRX_IN	SBOT	VDDA1	VDD_MSM	VDDA2	RF_ON	WB_MX_I NM	WPRXLBM	GND	GND	GND	WPRXSE1 _OUT	M
N	GND		VDDA2	VDDA1	VTUNE2	VDDA2	VDDA2	WB_MX_I NP	WPRXLBP	WPRXHBP	WPRXHBM	WPRXSE2 _OUT	GND	N
	1	2	3	4	5	6	7	8	9	10	11	12	13	

RTR6285A IC pin assignments (top view)

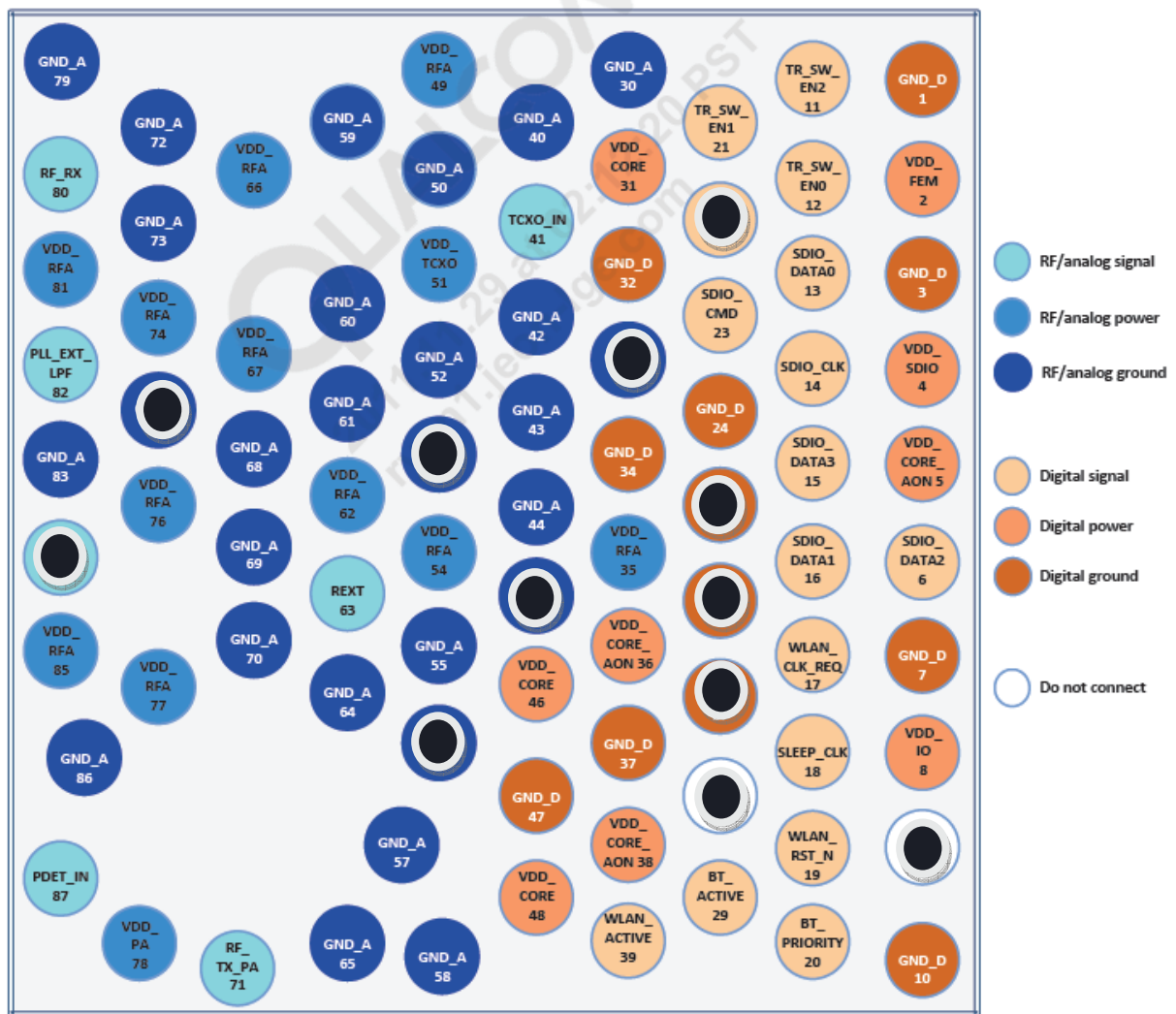
○ USE

● NOT IN USE



WCN2243 IC pin assignments, top view

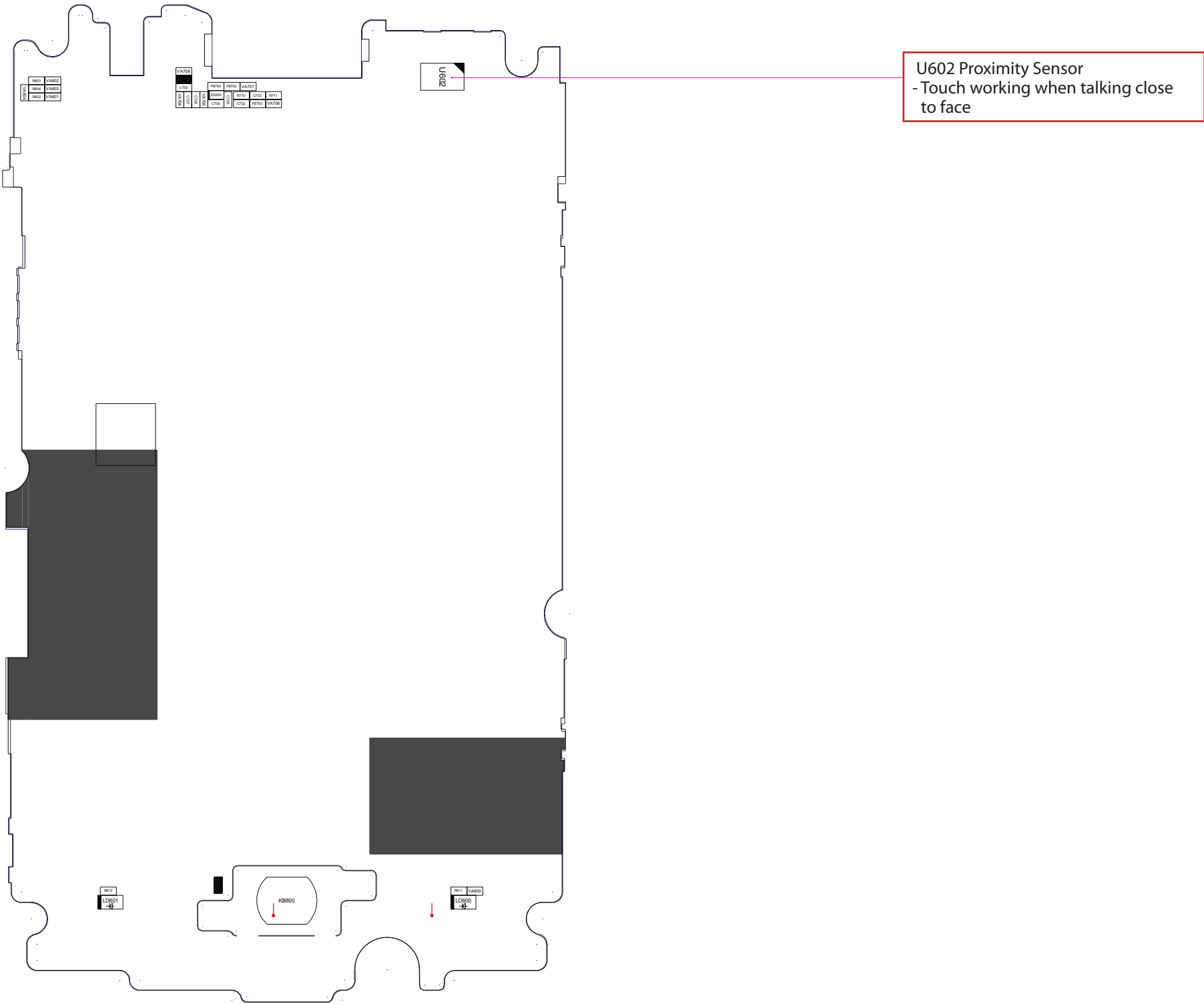
U901 – WCN1314 (WiFi) (Top View)



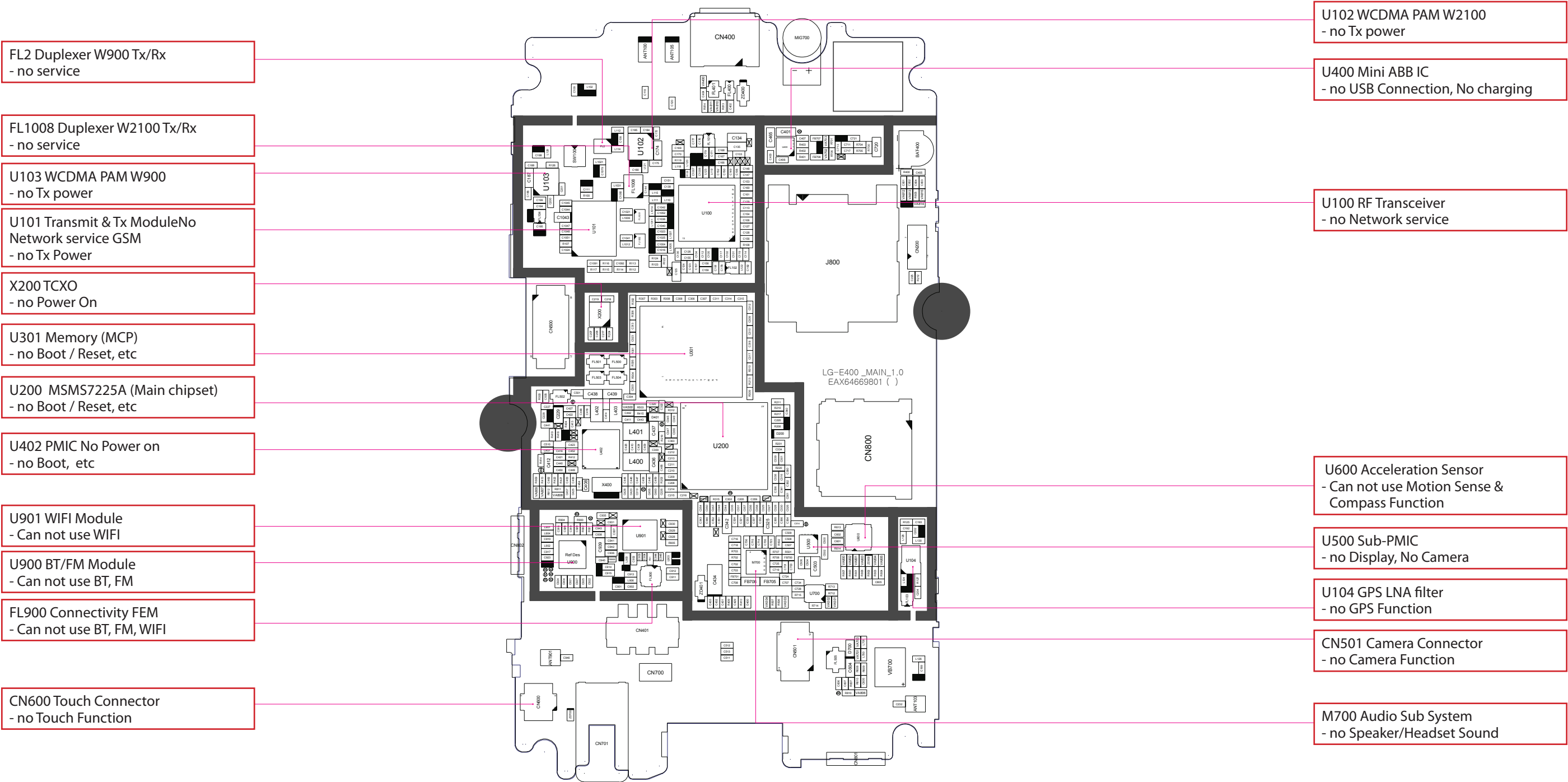
WCN1314 IC pin assignments (top view)

- USE
● NOT IN USE

9. PCB LAYOUT



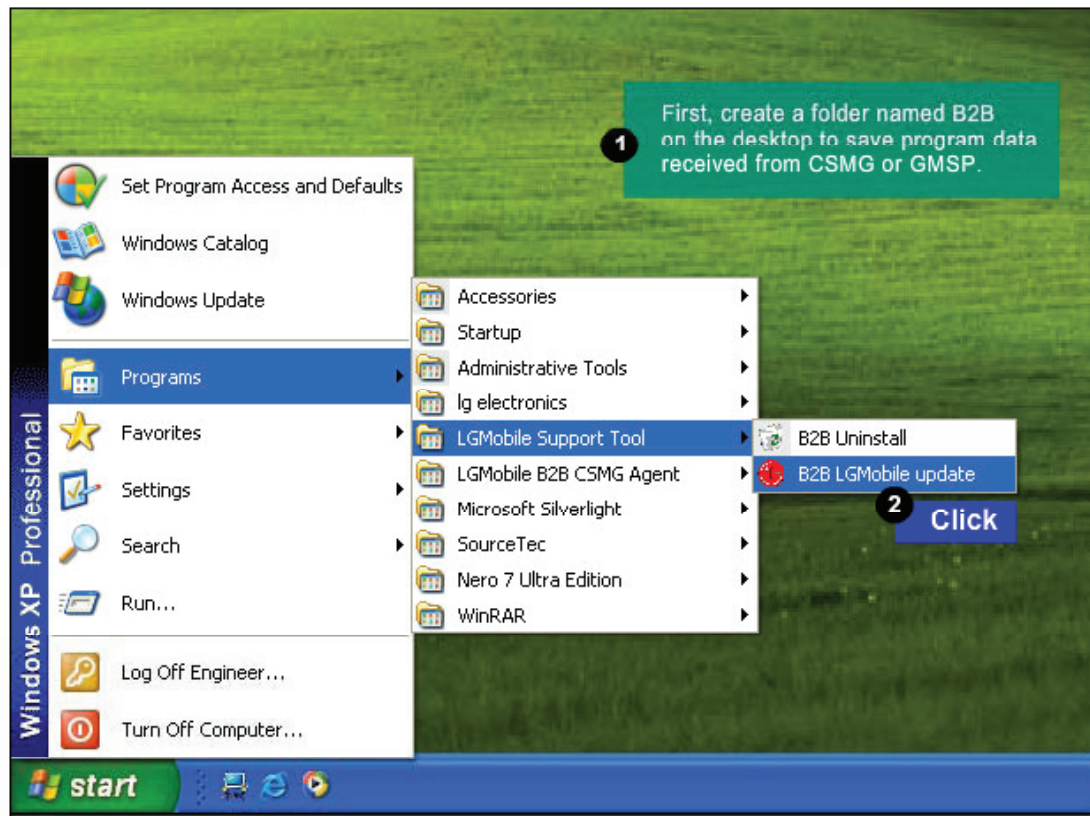
LG-E400_MAIN_EAX64669801_1.0_TOP

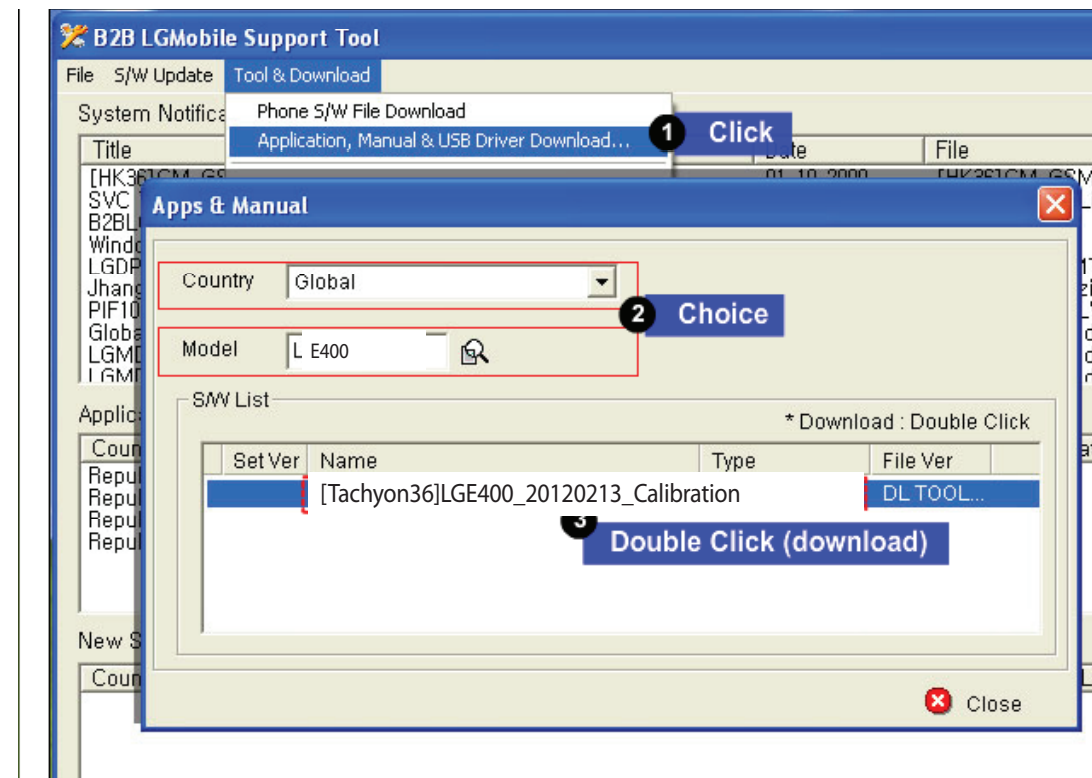
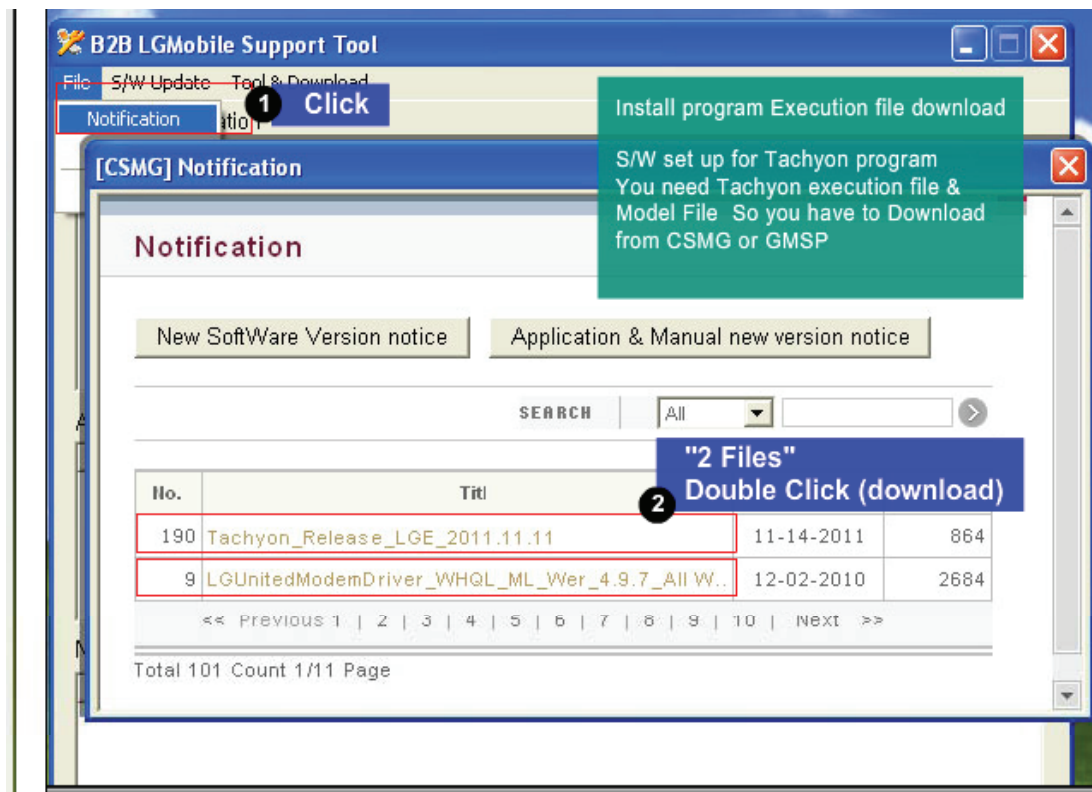


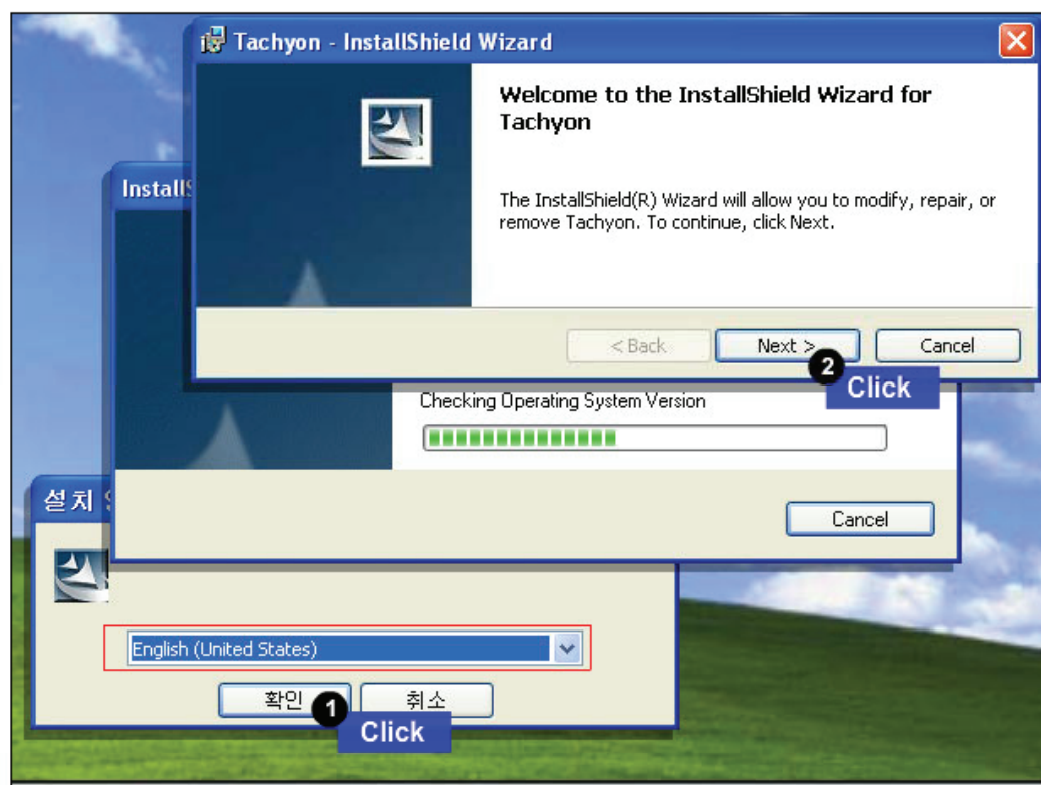
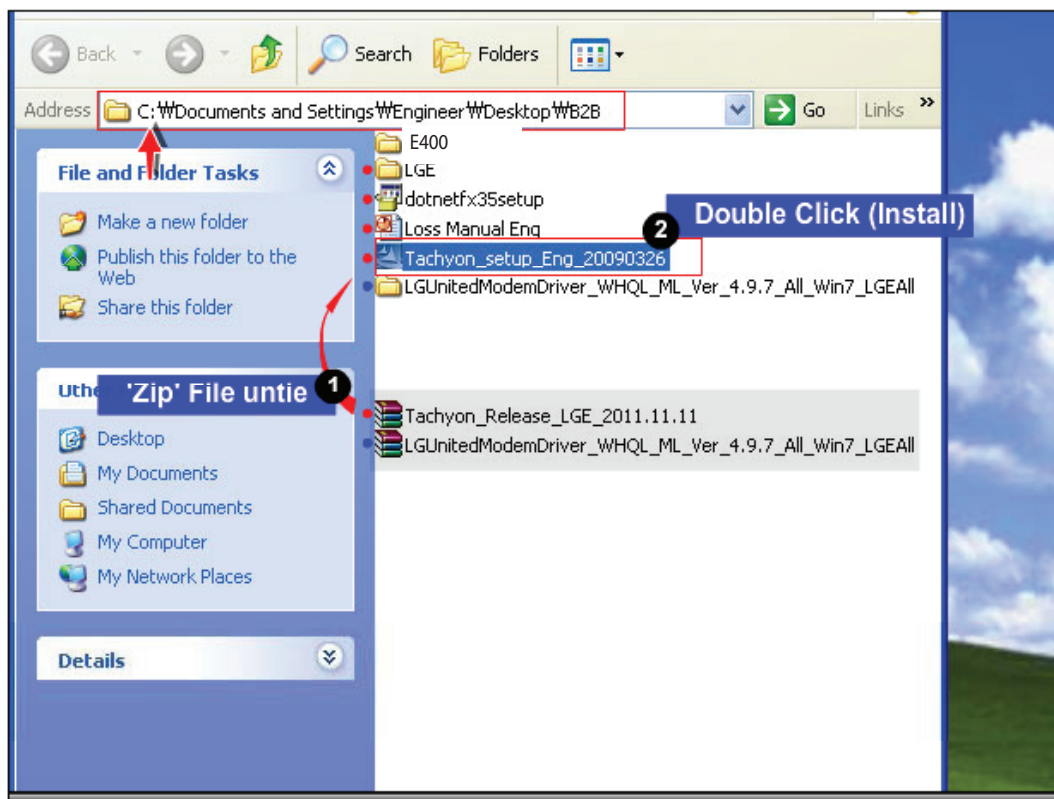
LG-E400_MAIN_EAX64669801_1.0_BOT

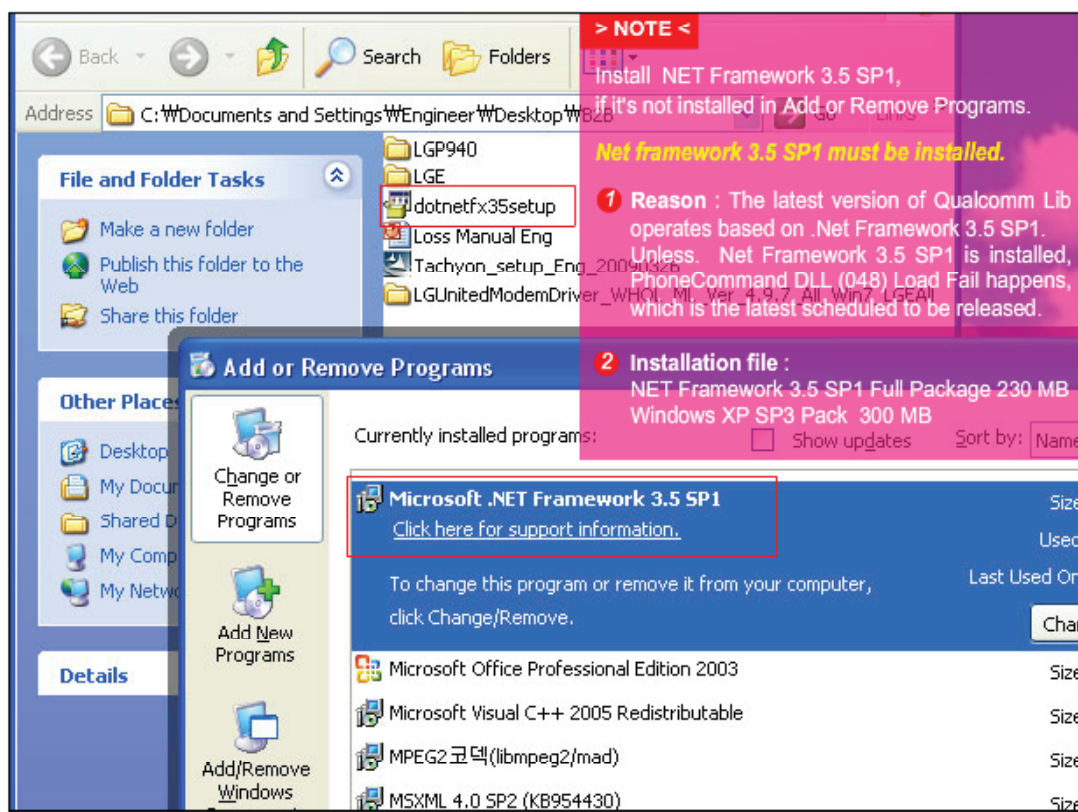
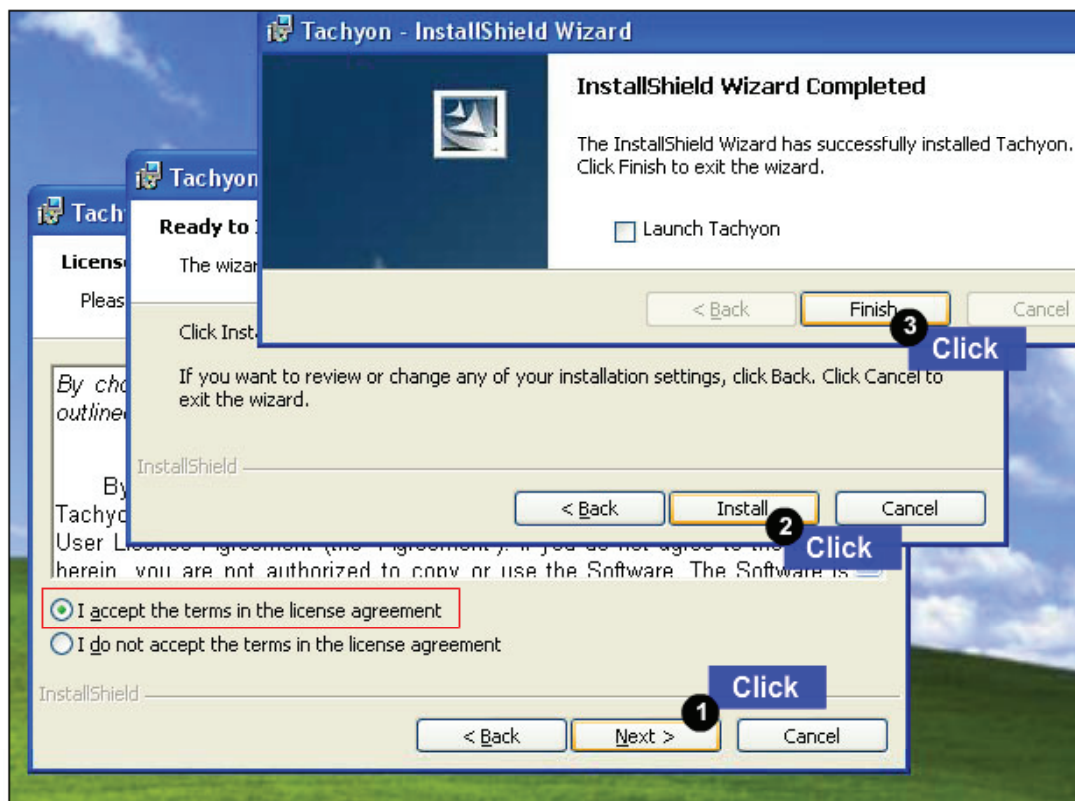
10. CALIBRATION

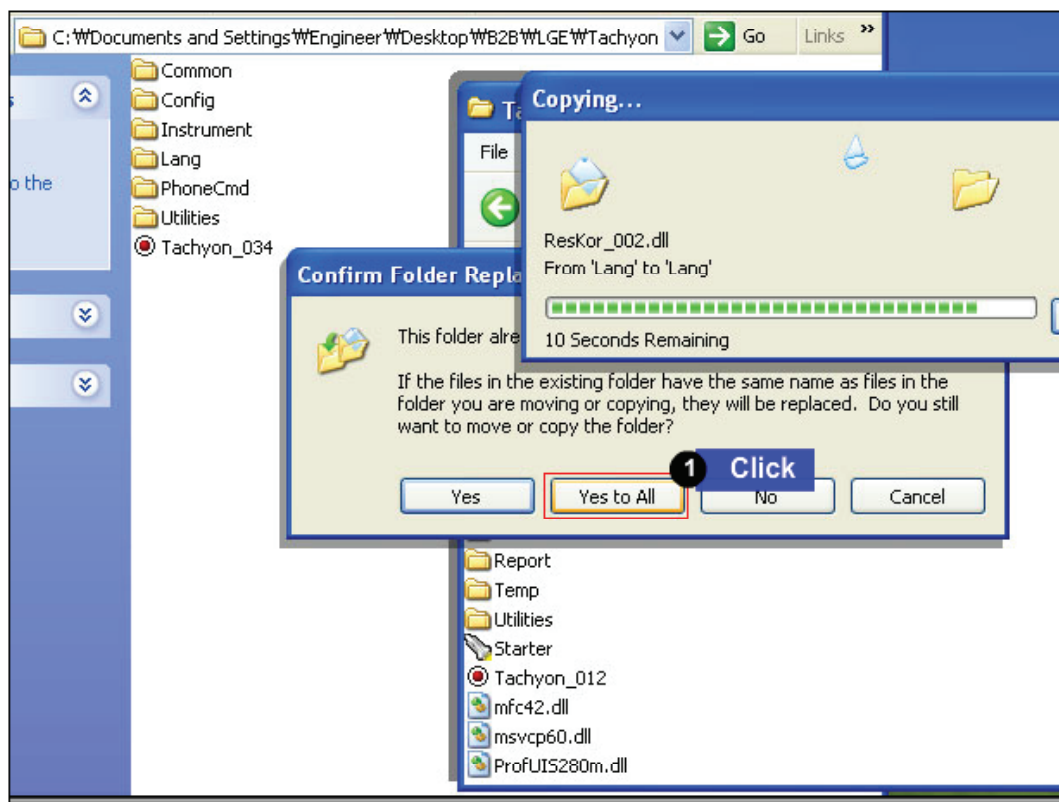
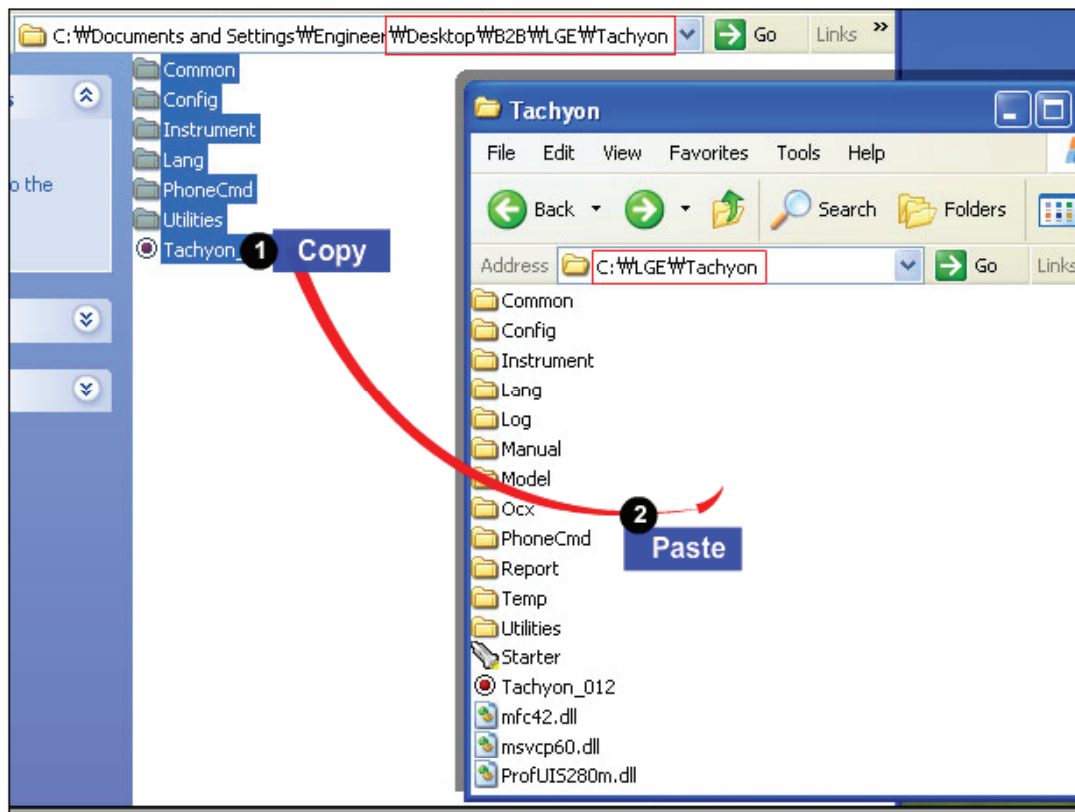
CAL INFORMATION		
S/W VERSION		
[Tachyon36]LGE400_20120213_Calibration		
H/W		
	Name	Part No.
PIF	PIF200(All Type)	BJAY0024021
USB Cable	USB Cable	RAD32247898
Power Cable	DC Power Cable	RAD32247878
I/O Cable	5P E-SATA	BJAY0024049
RF Cable_Main	MS156	BJAY0024004
Power Supply_PIF	Power Supply 5.3V	
Power Supply_Phone	Power Supply 5.0V	
RF Test Equipment	E5515C(8960)	

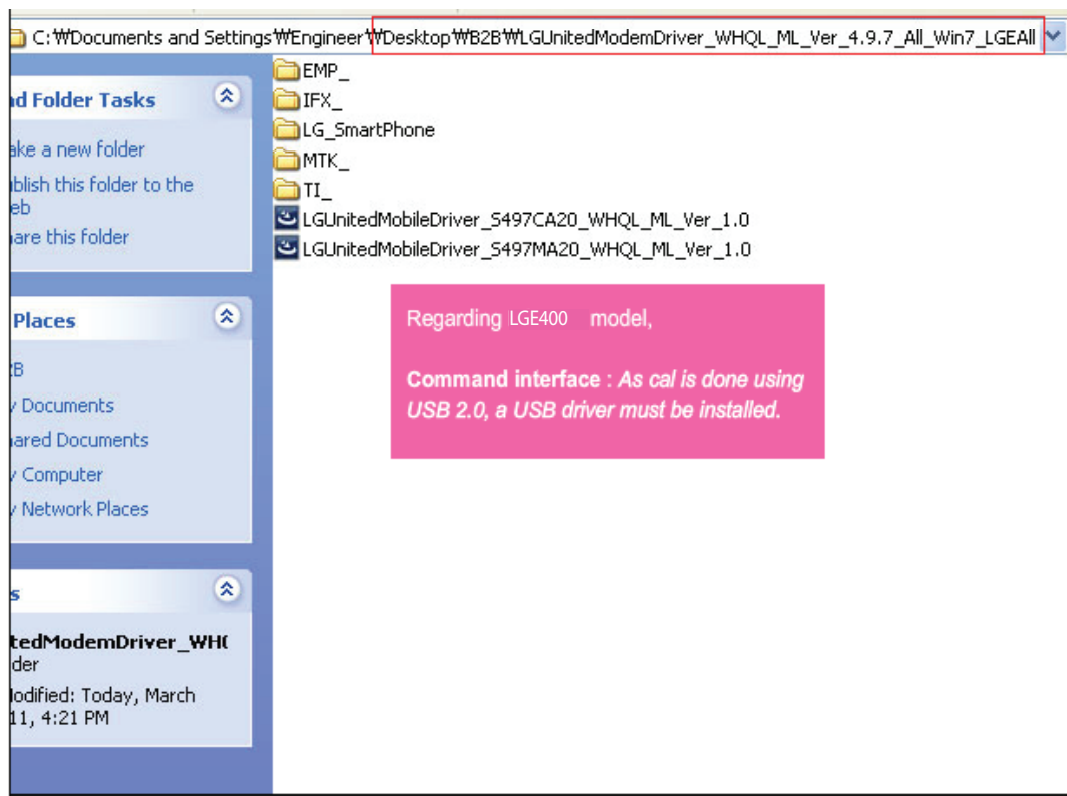
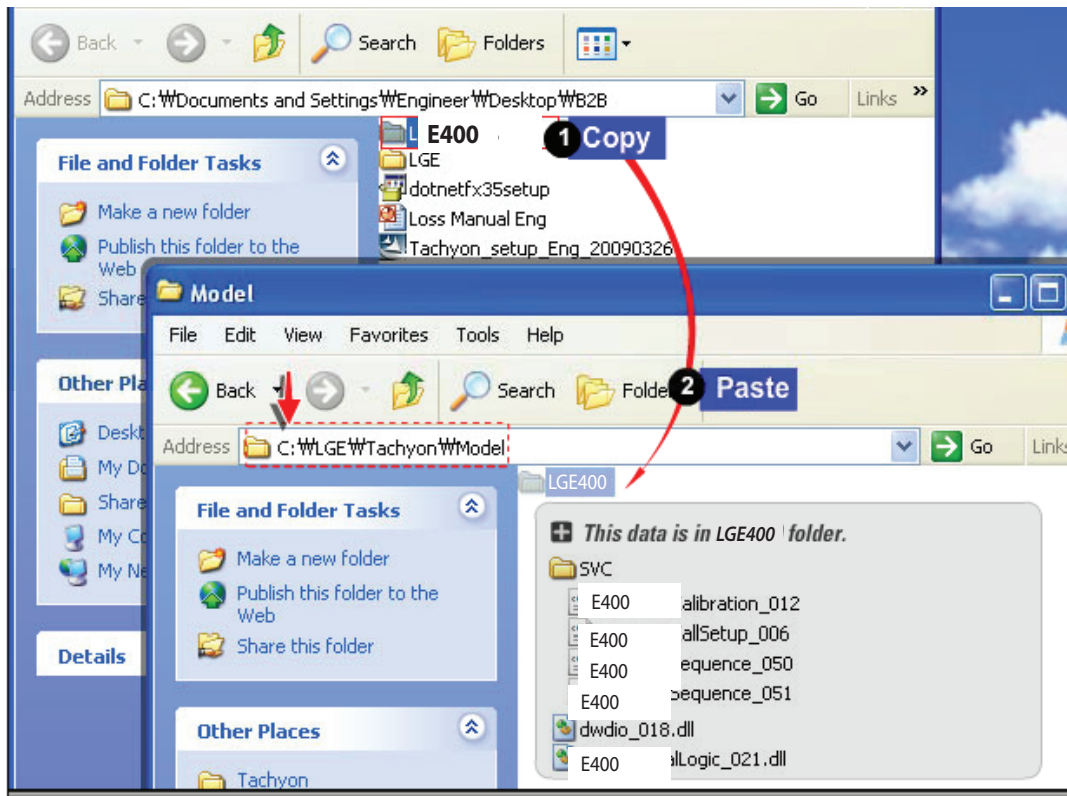


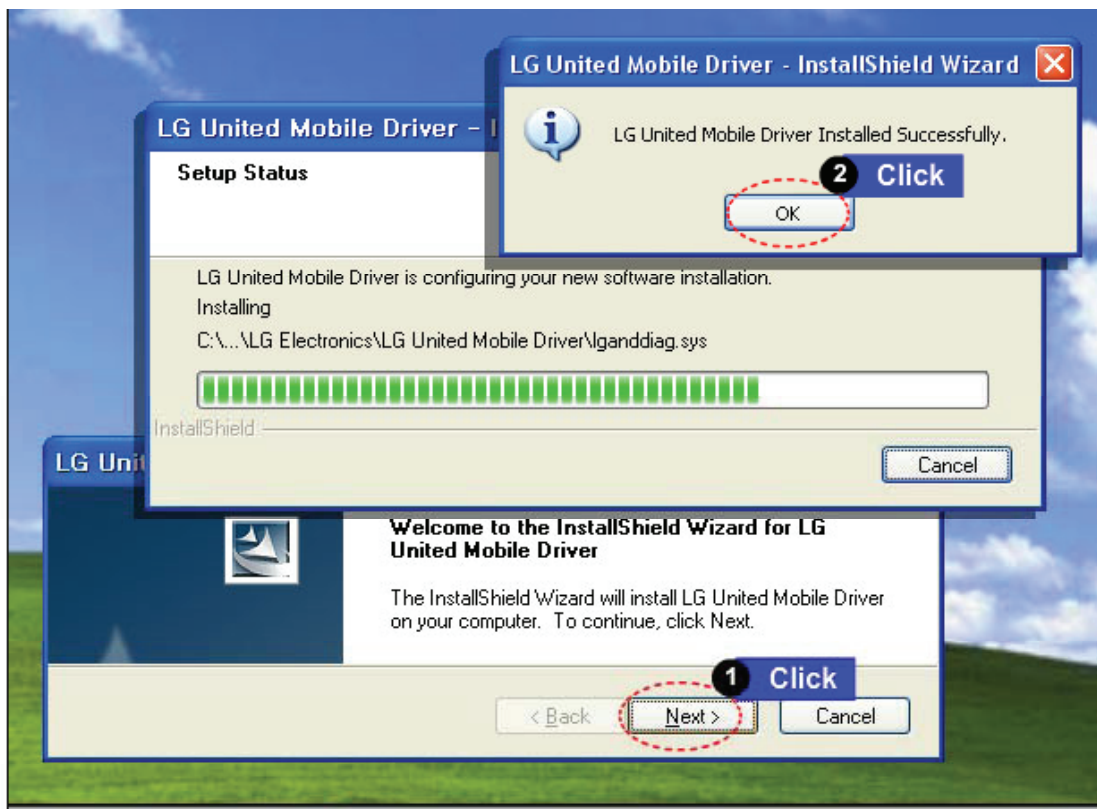
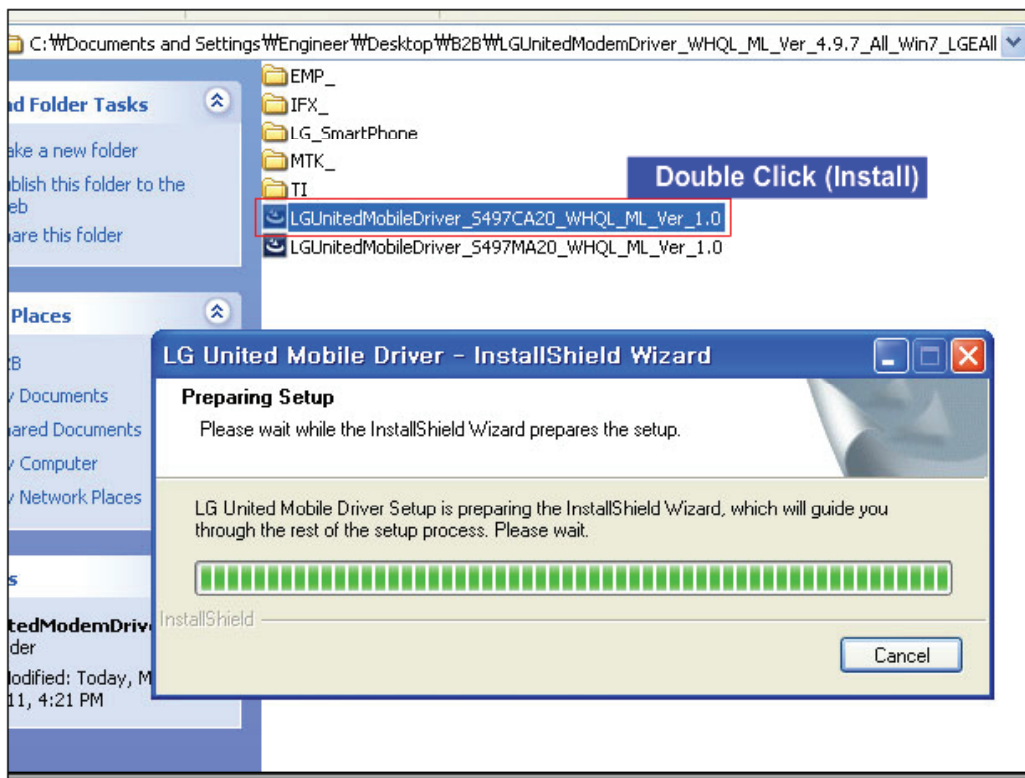


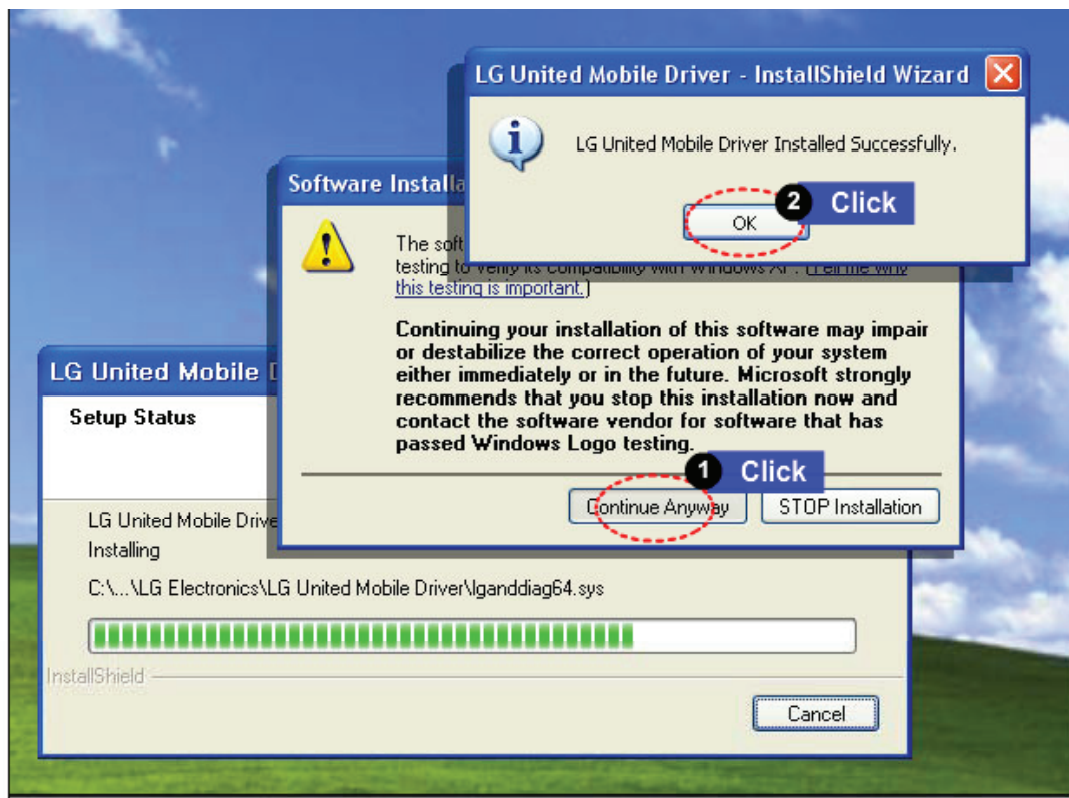
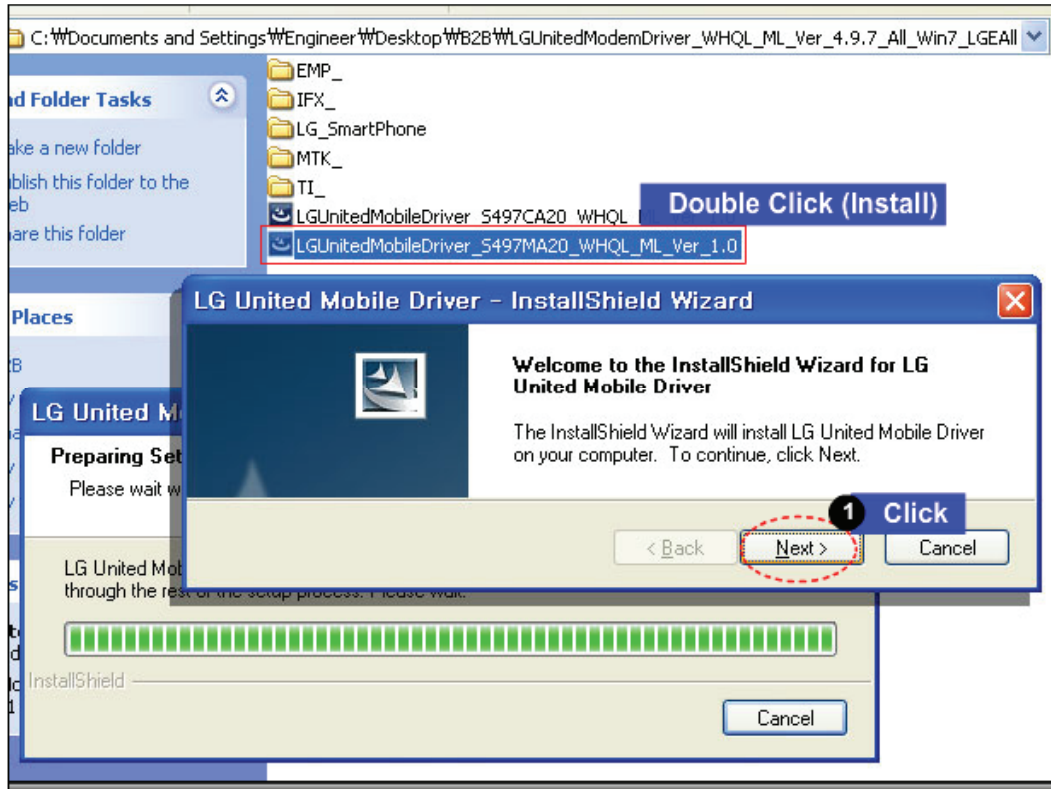


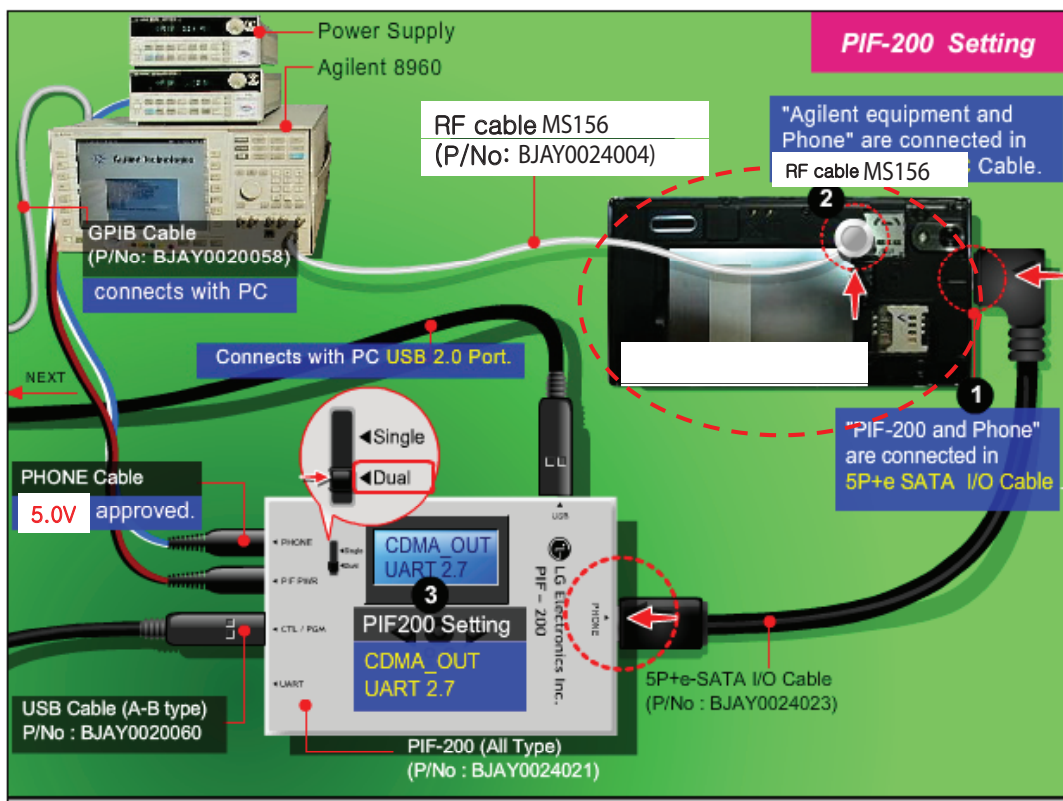
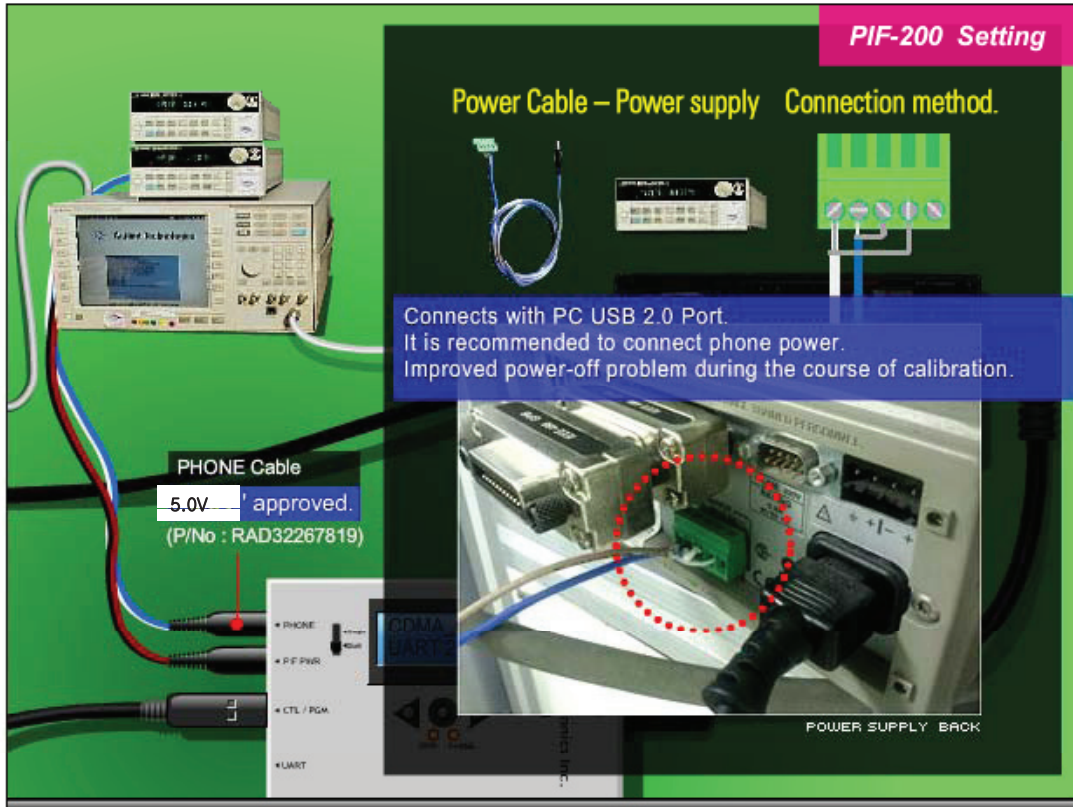


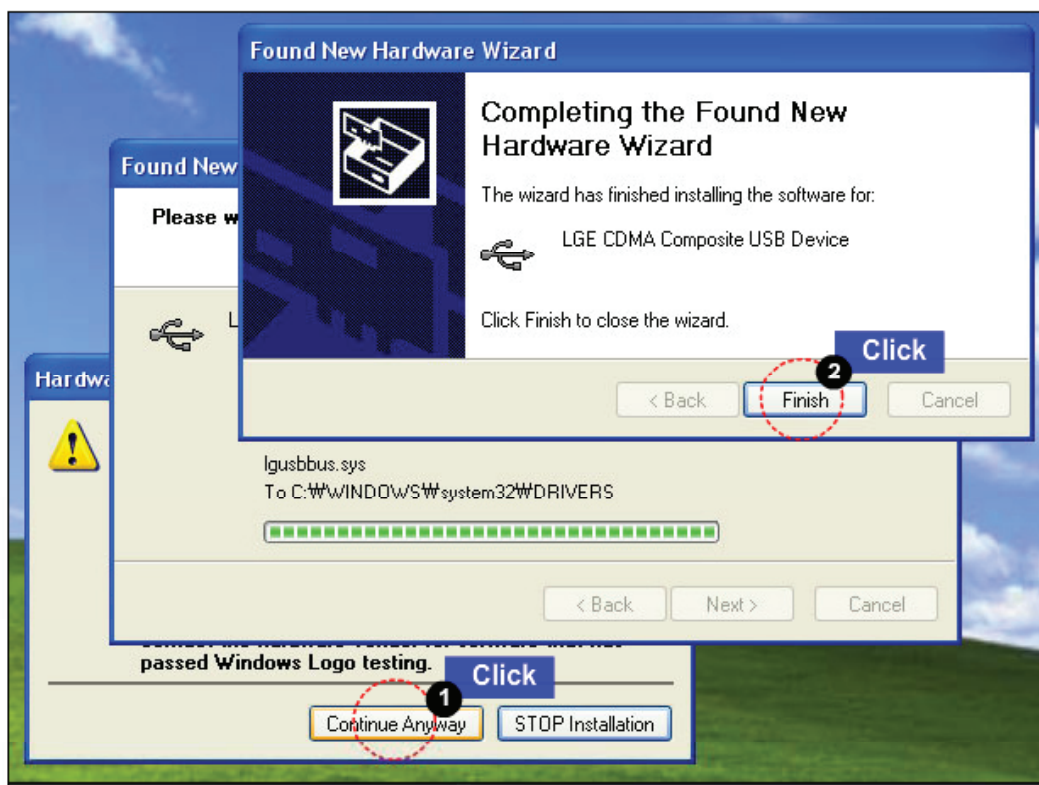
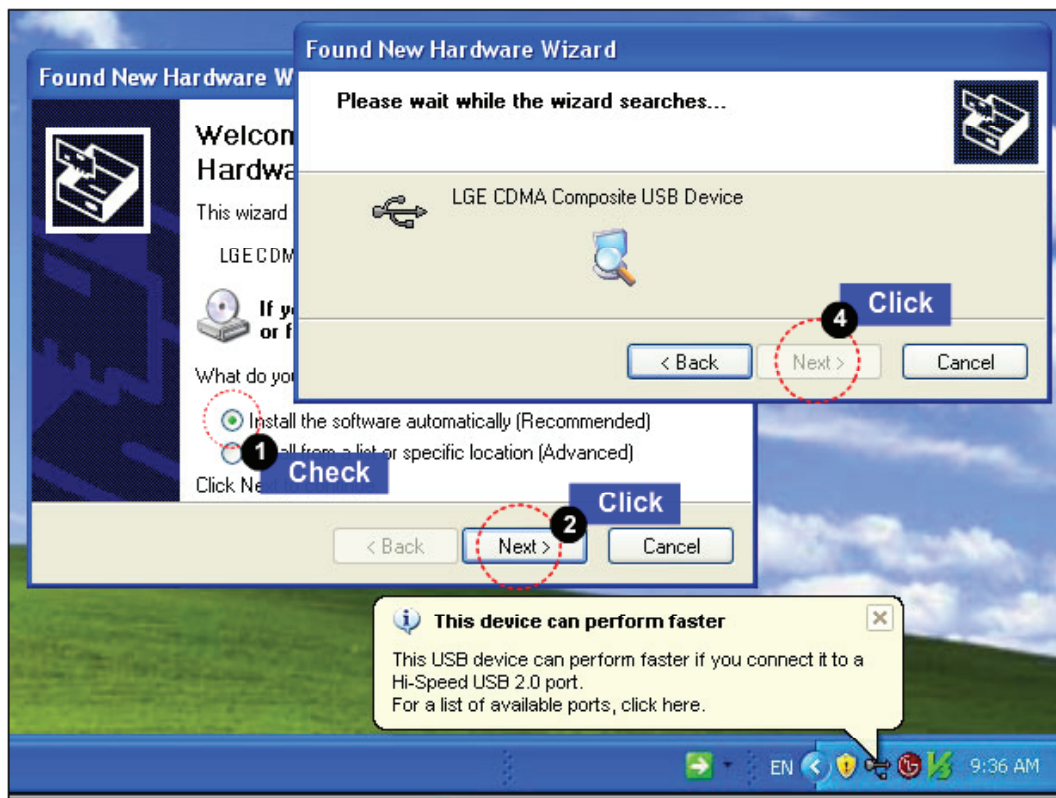


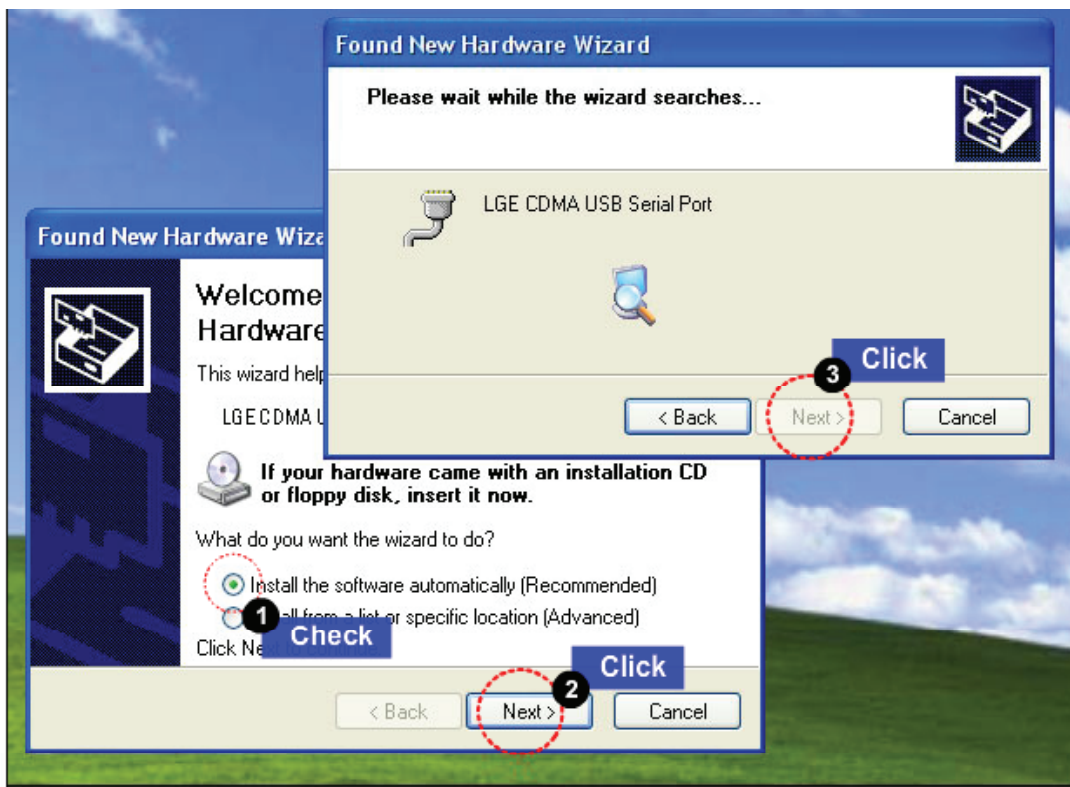
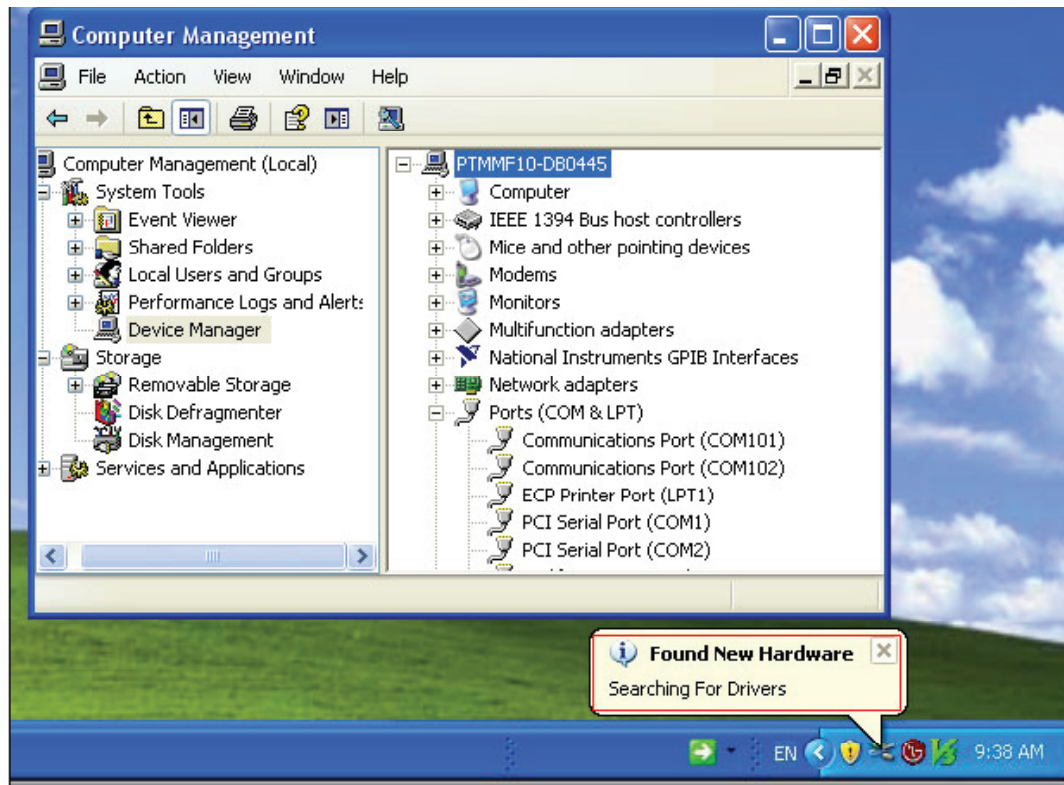


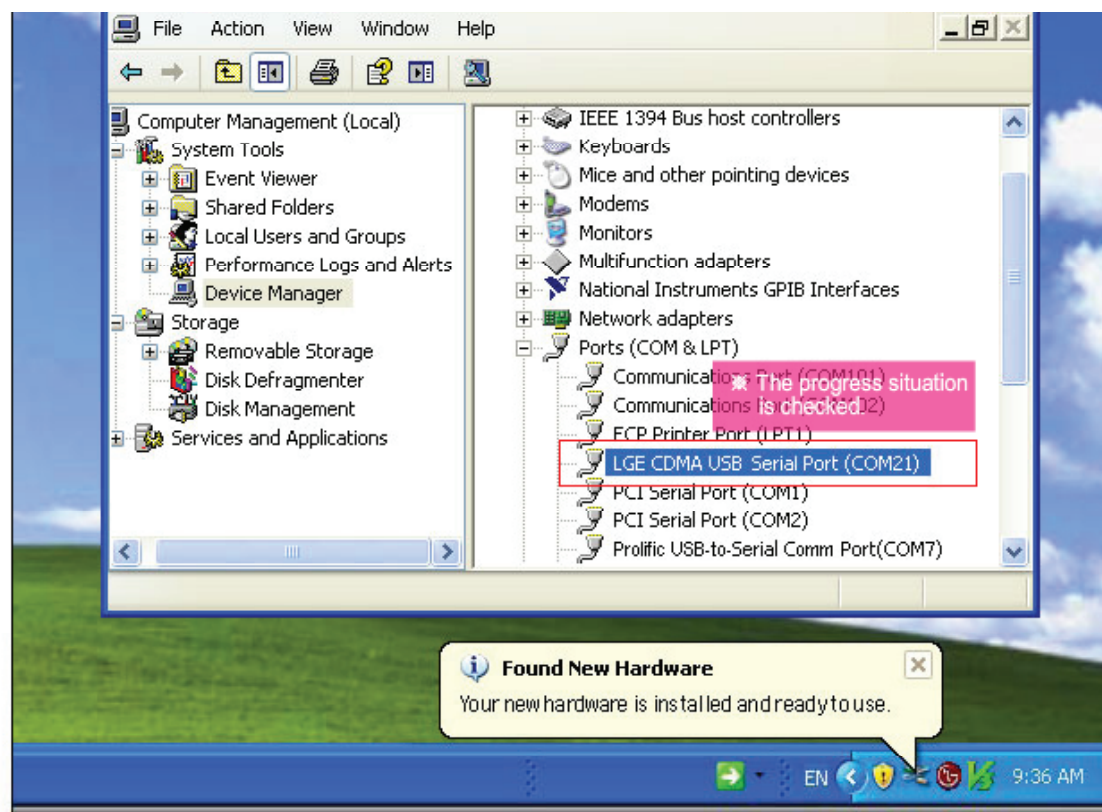
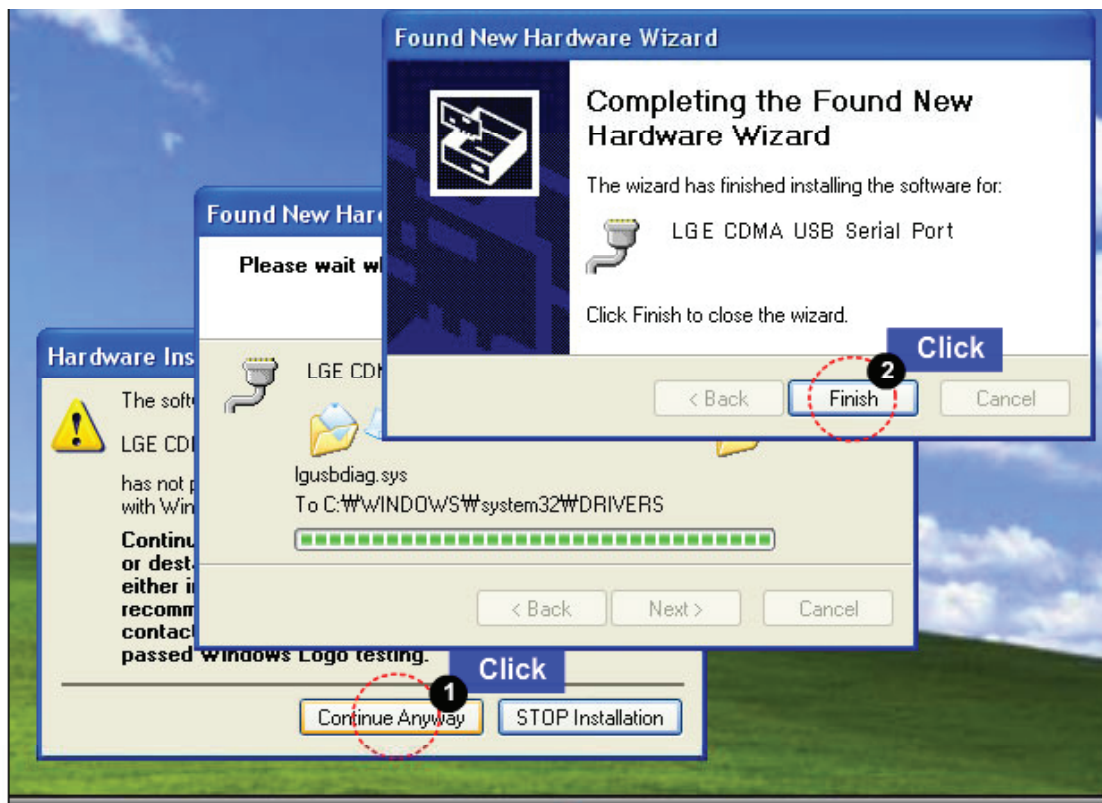


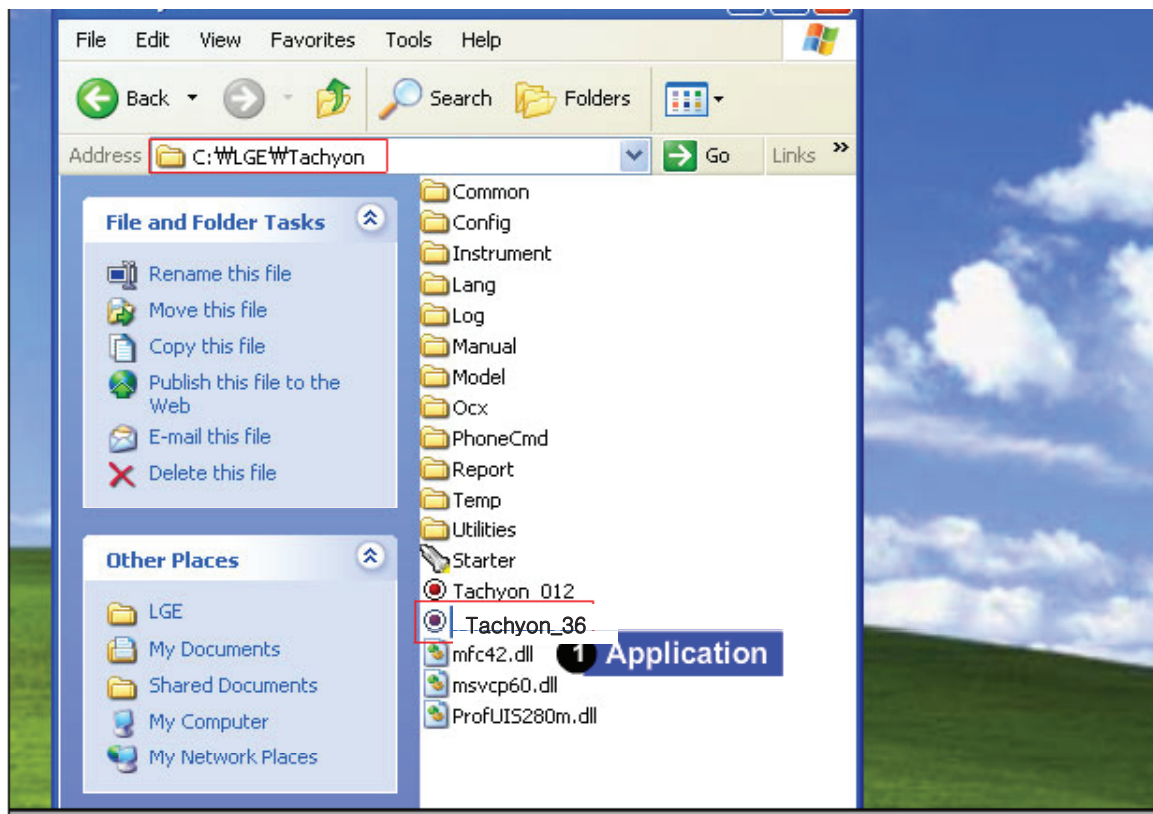
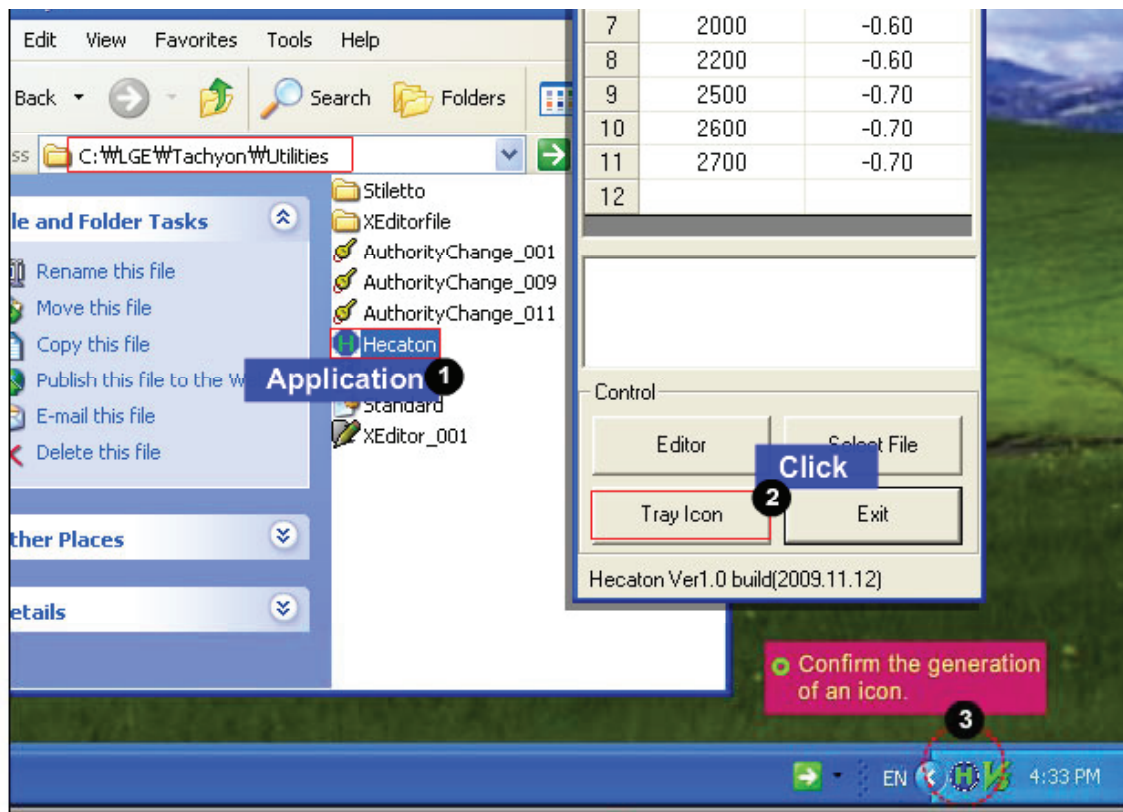


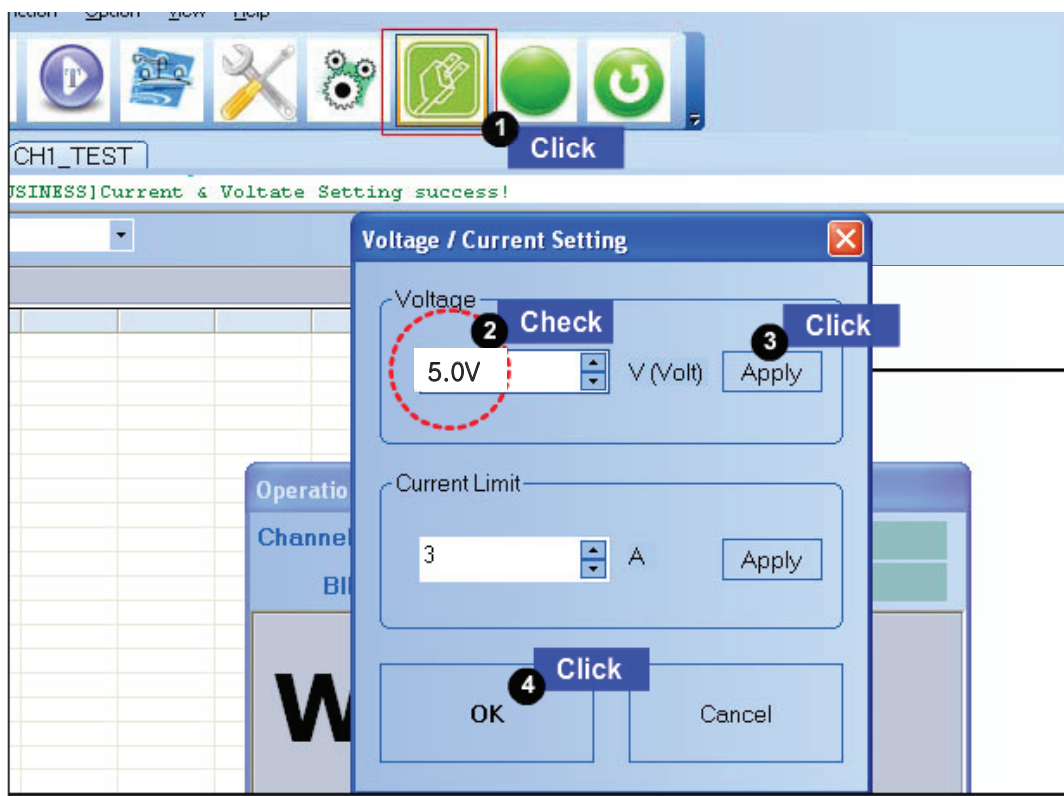
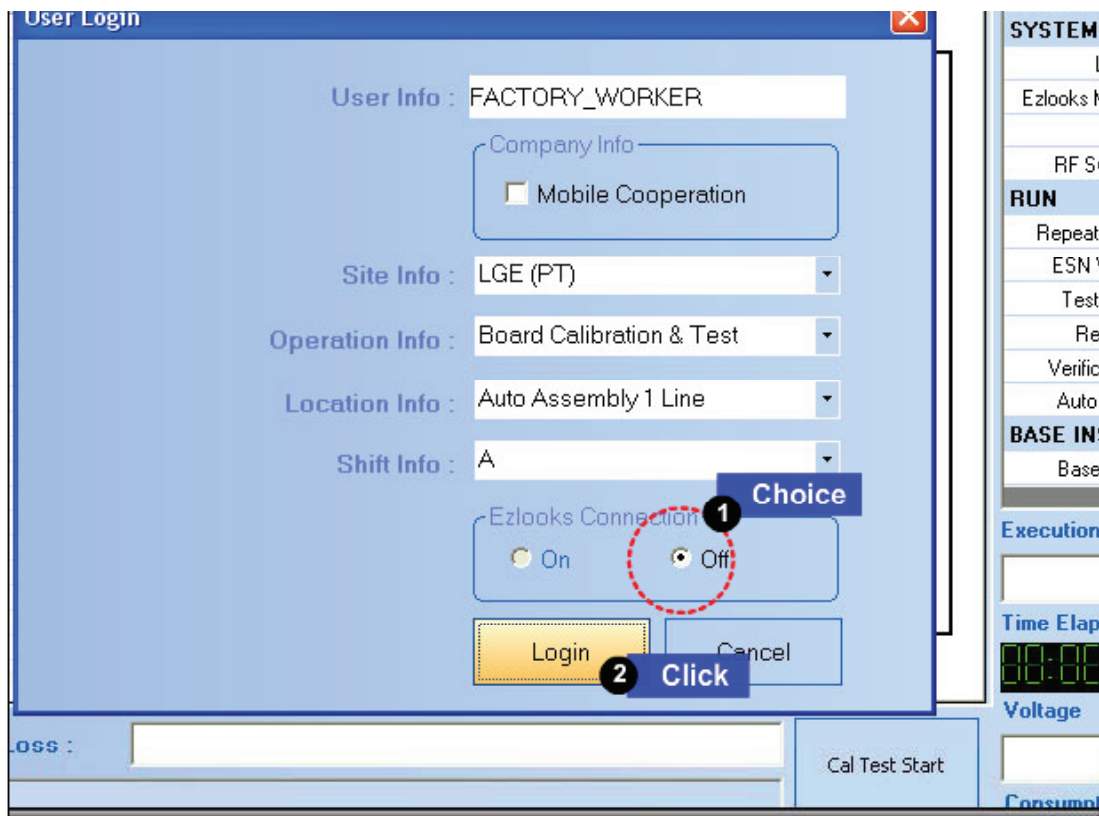


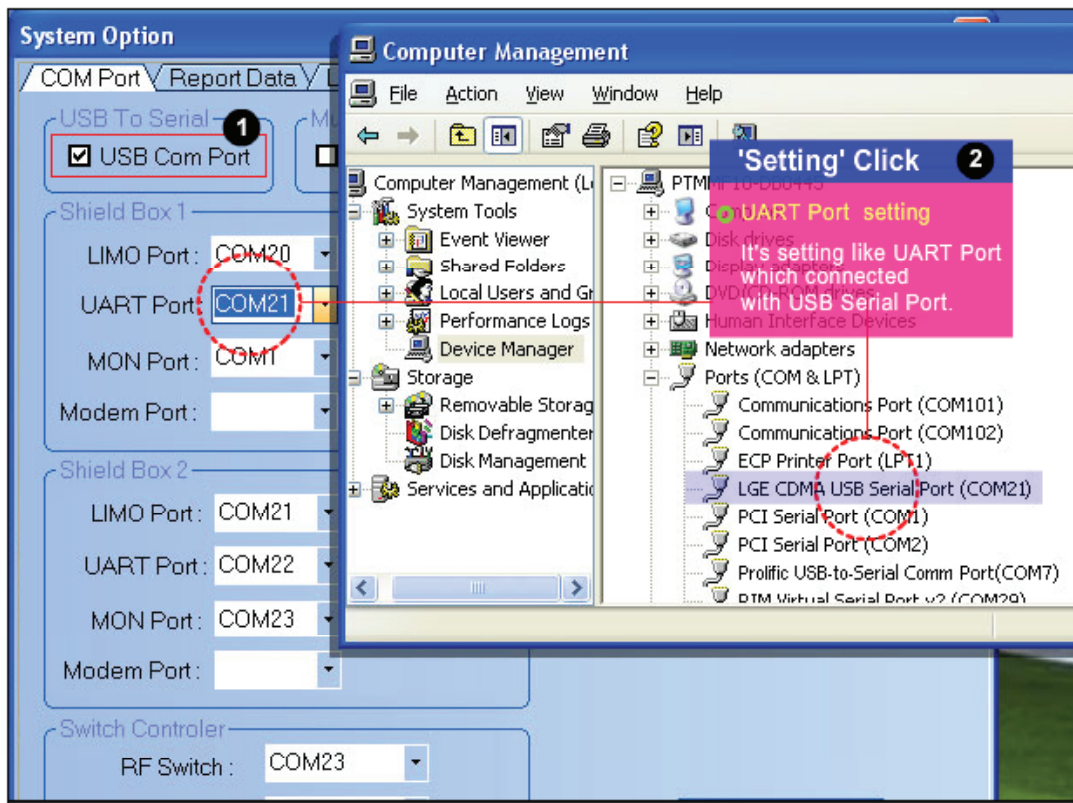
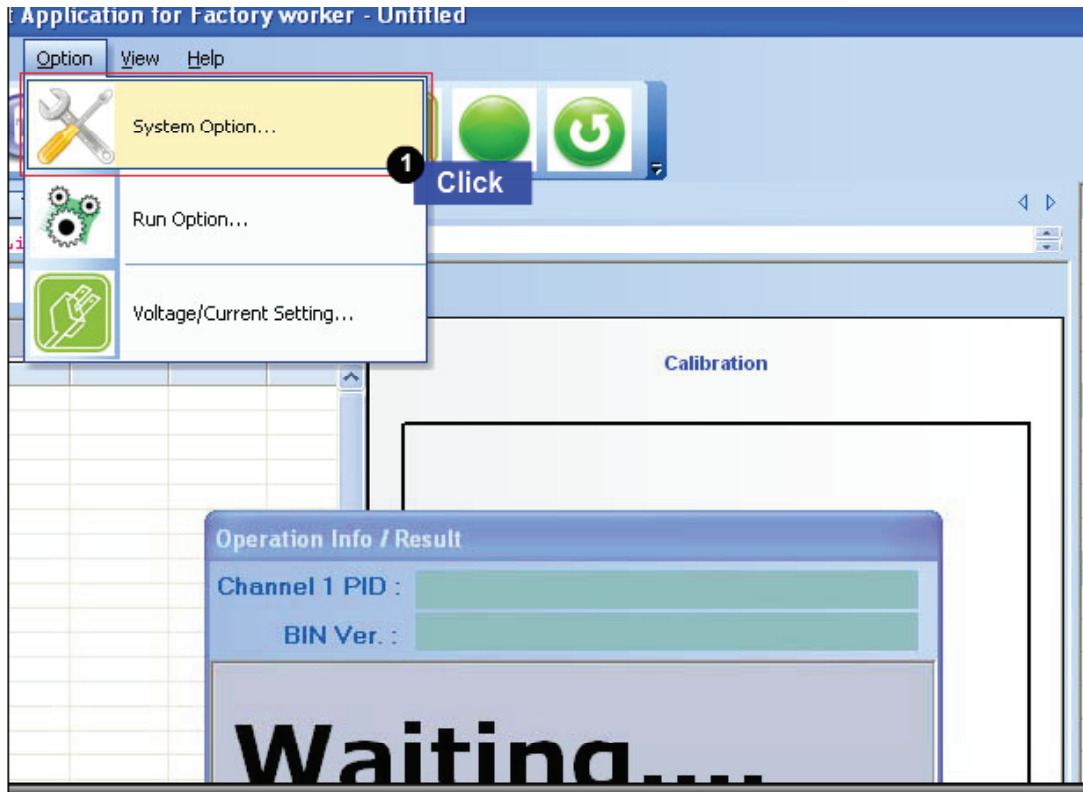


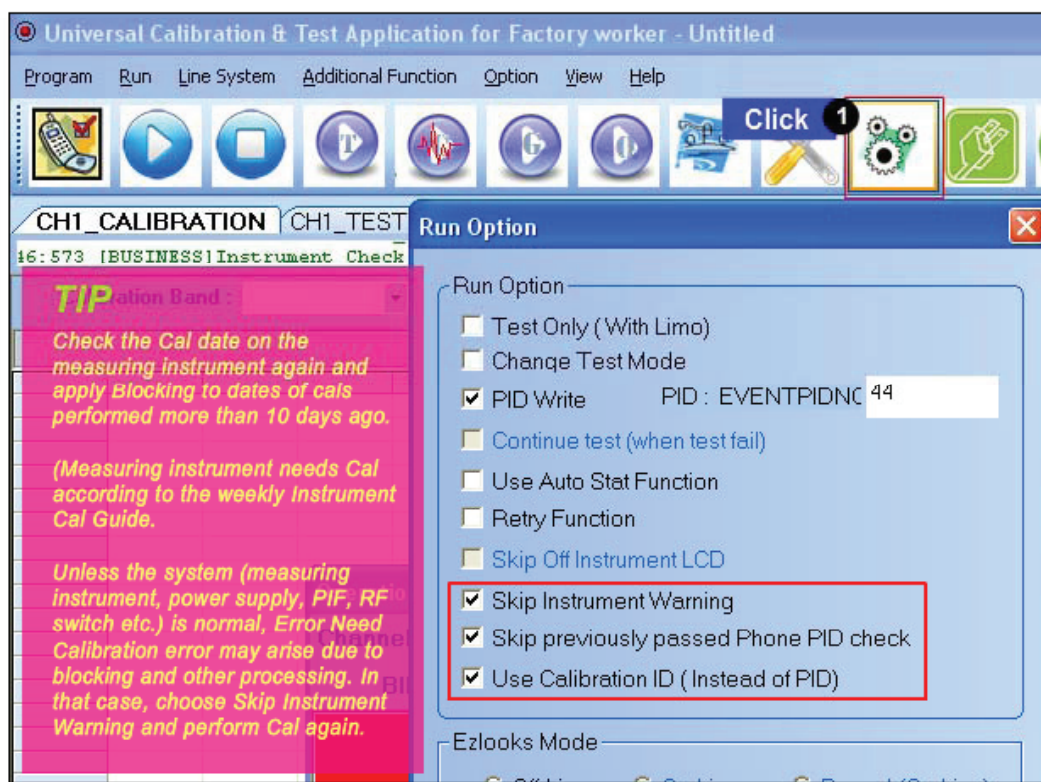
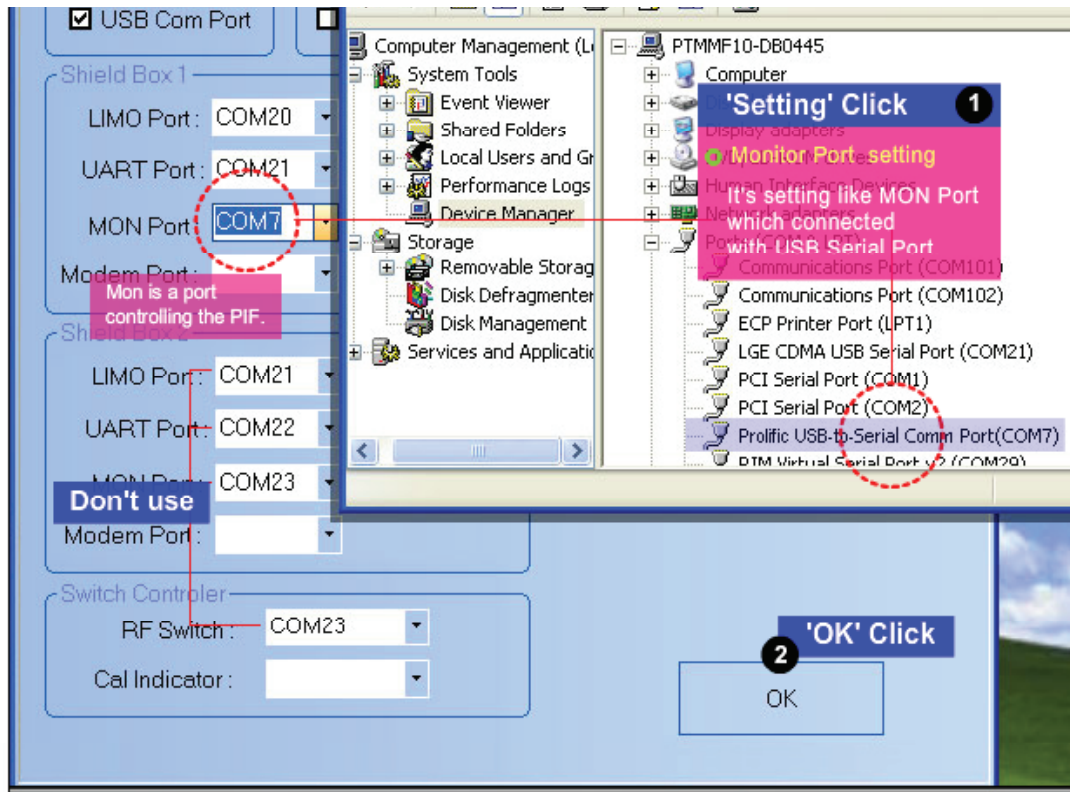


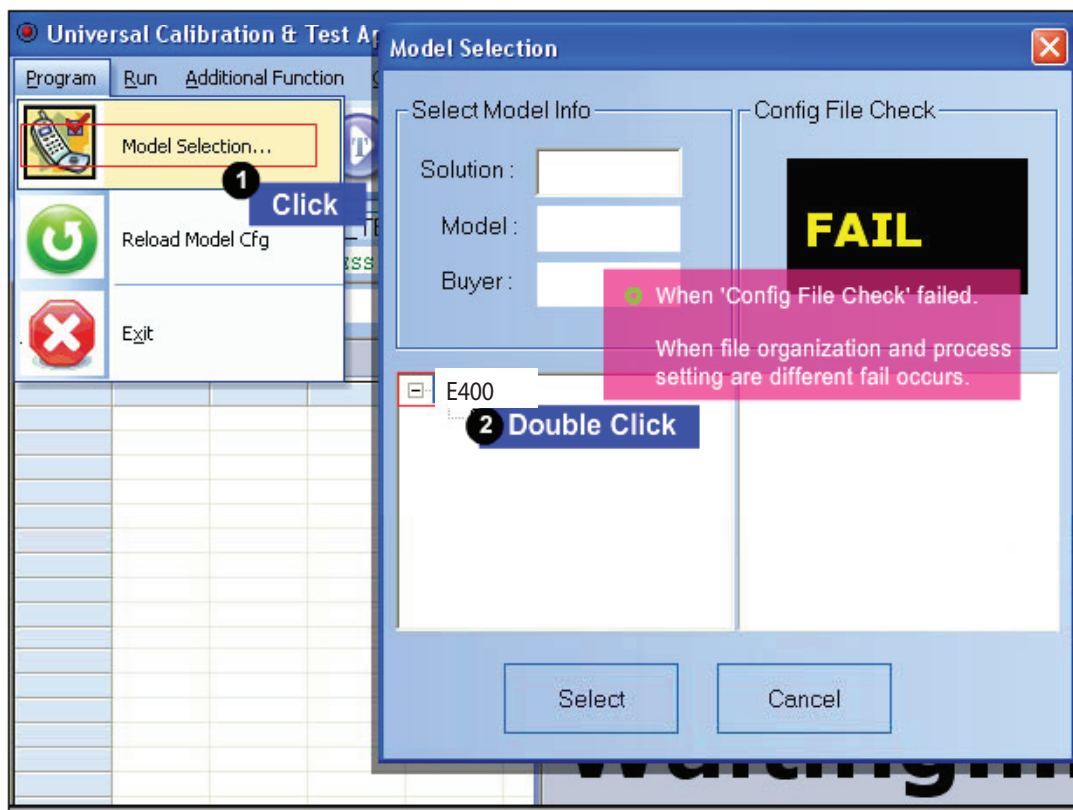
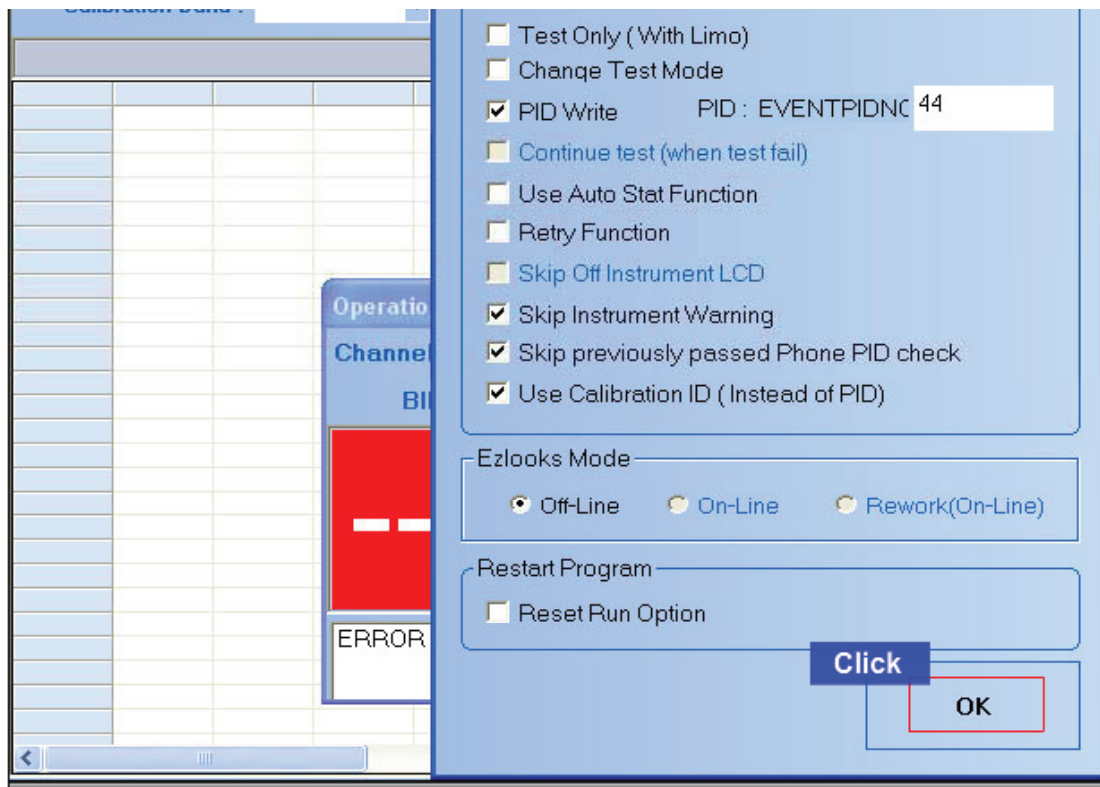


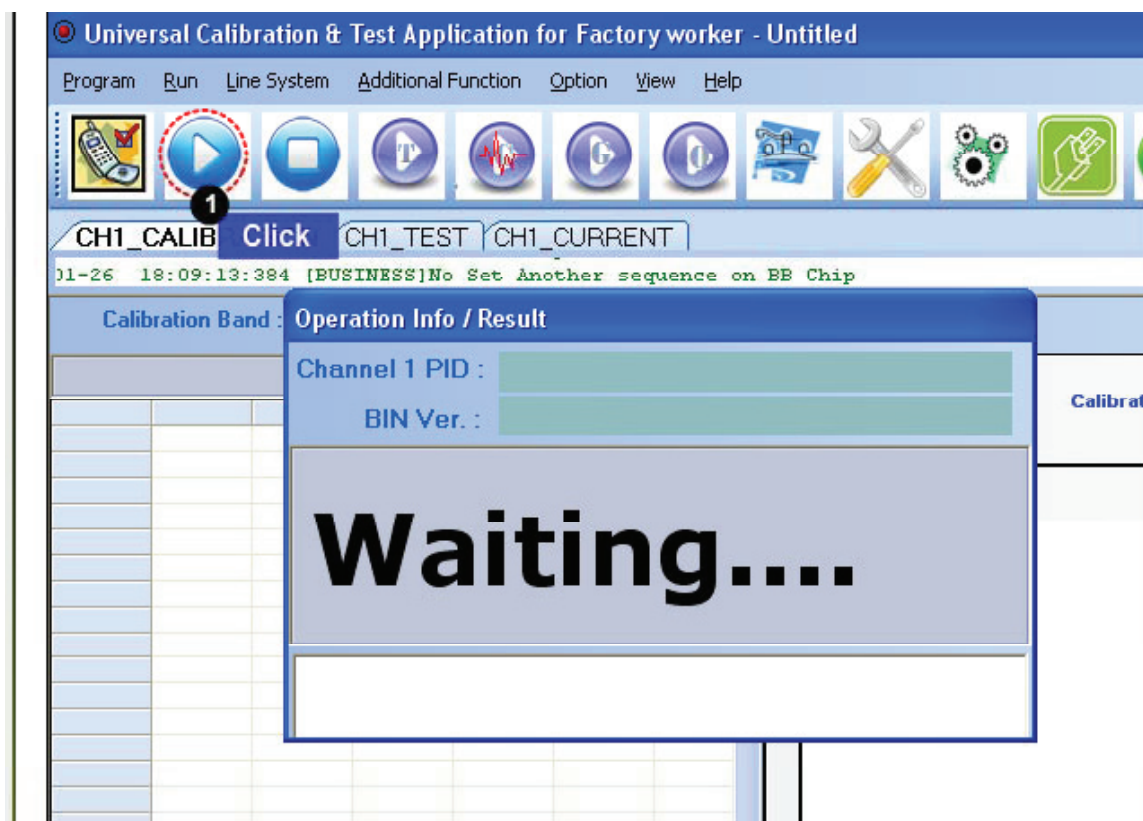
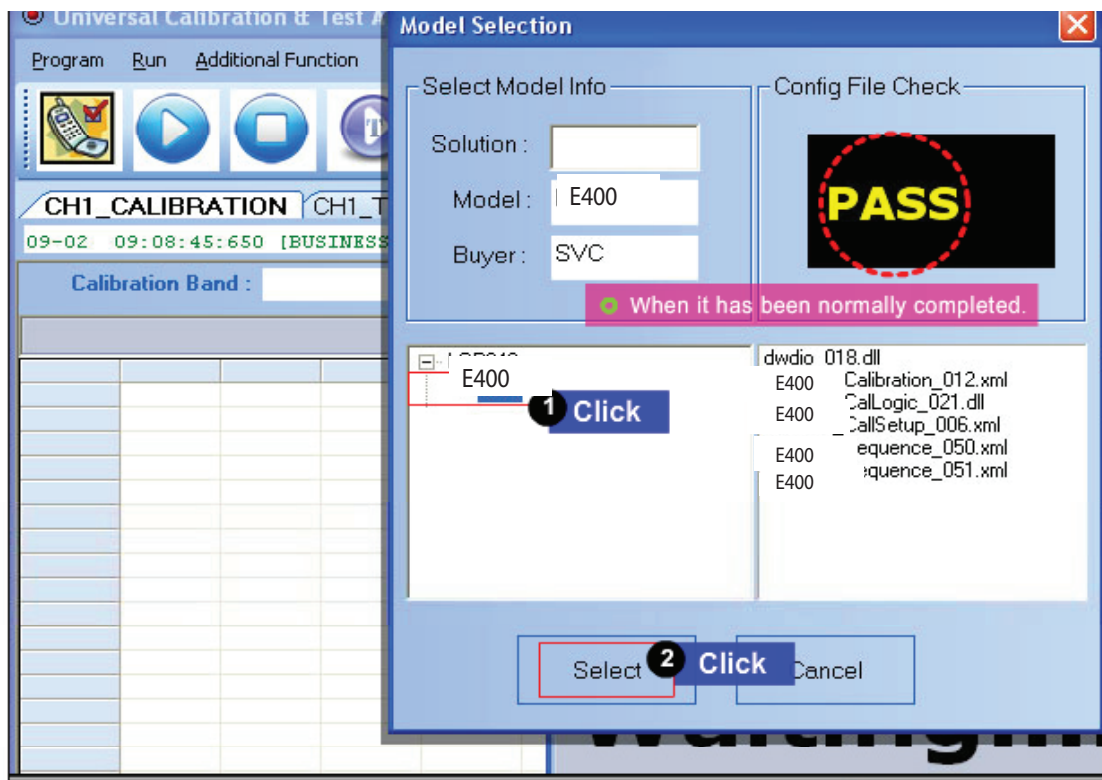


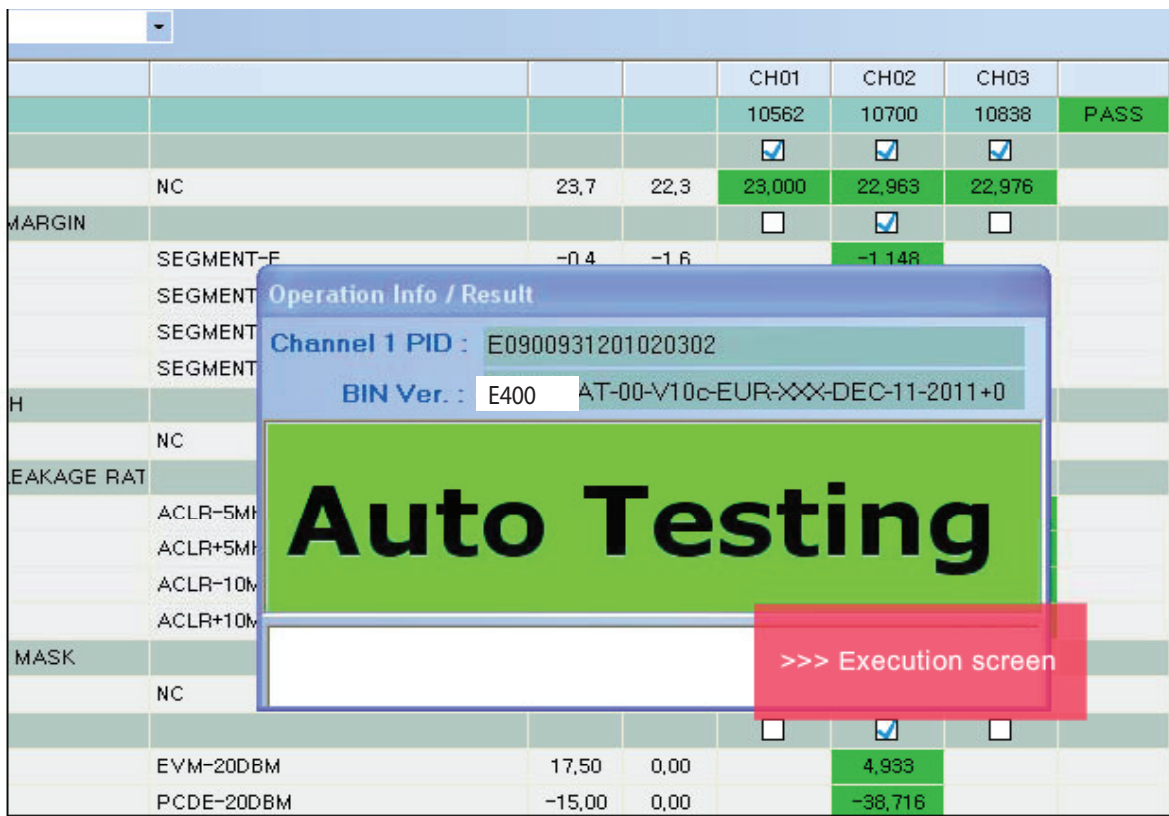
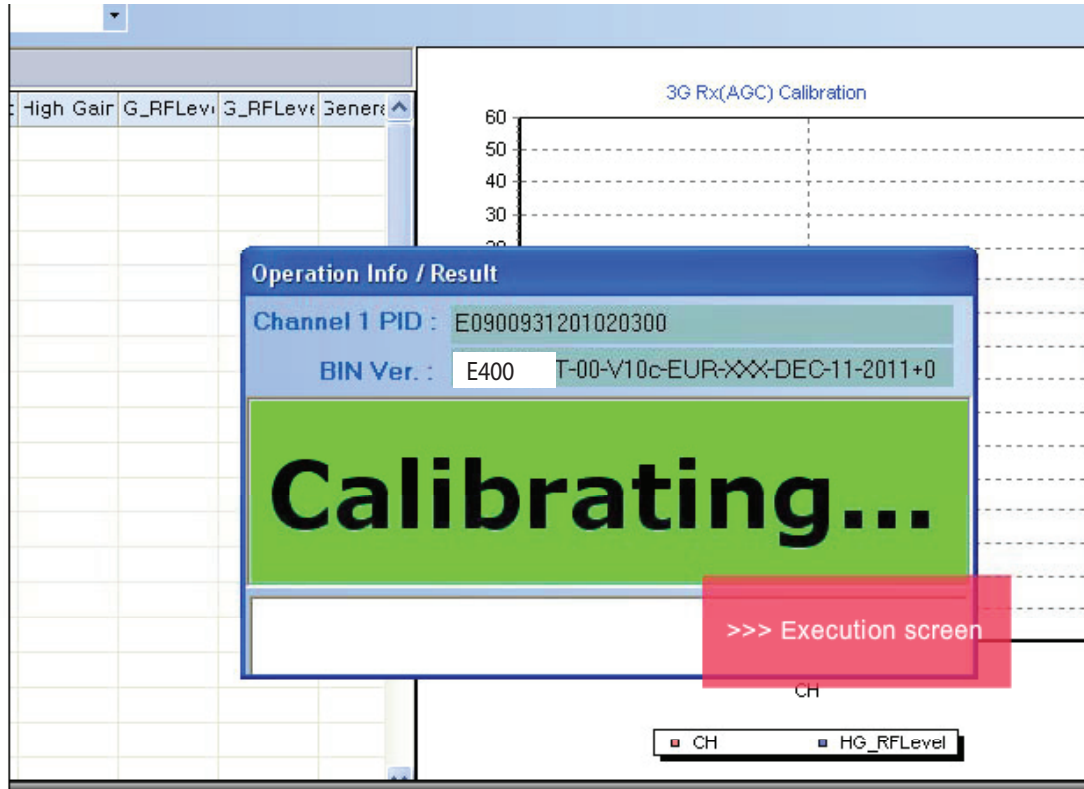








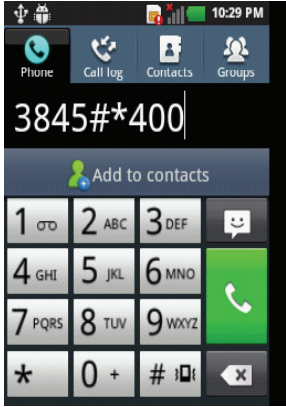
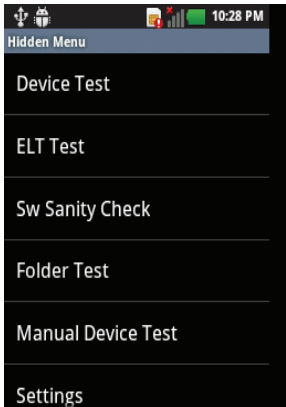





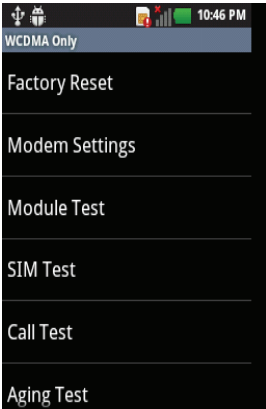
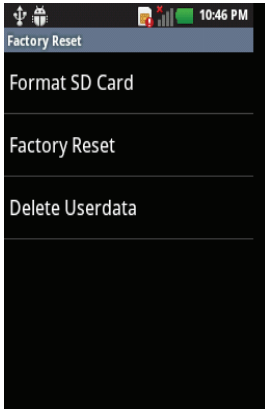
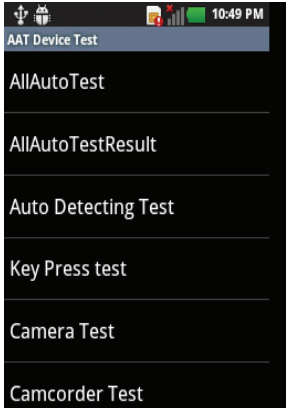
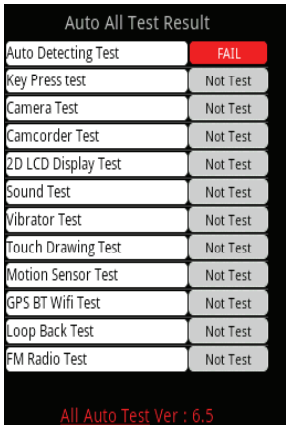
				10562	10700	10838	PASS
				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	NC	23,7	22,3	23,065	22,983	23,013	
MARGIN				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
SEGMENT	<div> <div>Operation Info / Result</div> <div>Channel 1 PID : F09000931201020299</div> <div>BIN Ver. : E400 AT-00-V10c-EUR-XXX-DEC-11-2011+0</div> <div> <div>---</div> <div>PASS</div> <div>---</div> </div> </div>						
SEGMENT							
SEGMENT							
SEGMENT							
OTH							
	NC						
LEAKAGE RAT							
	ACLR-5M						
	ACLR+5M						
	ACLR-10M						
	ACLR+10M						
ON MASK							
	NC	0,5	-0,5				
Y							<input type="checkbox"/>
	EVM-20DBM	17,50	0,00		4,720		
	PCDE-20DBM	-15,00	0,00		-38,441		
System Loss :				MySystem(MS).gms : RF900 6C.grf			

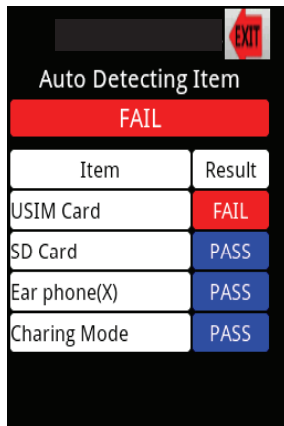
'PASS' The End

11. HIDDEN MENU

	<p>Hidden Menu Start</p> <p>Start shortcut keys: 3845#*400#</p>
	<p>Hidden Menu</p> <p>Start the desired menu: Menu, click</p>
	<p>Version Info</p> <p>Classified Information representation</p> <ul style="list-style-type: none"> -> Hidden Menu -> Settings -> Version Info

11. HIDDEN MENU

		<p>Factory Reset</p> <p>Format SD Card : SD Card Data reset</p> <p>Factory Reset : Reset as default</p> <p>Factory Settings</p> <p>Delete Userdata : Disabled</p> <p>-> Hidden menu</p> <p>-> WCDMA-Only</p> <p>-> Factory Reset</p>
	<p>AAT Device Test</p> <p>Allauto Test :</p> <p>-> You can test all functions automatically</p>	
	<p>Auto All Test Result</p> <p>-> You can check Test Results</p>	



Auto Detecting Item

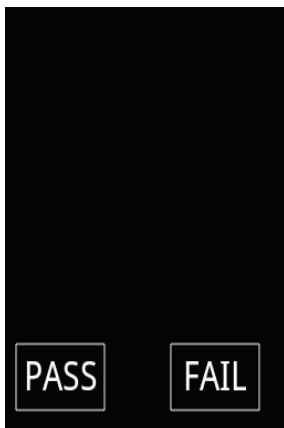
Check below Items

USIM Card : connecting is PASS

-> SD Card : connecting is PASS

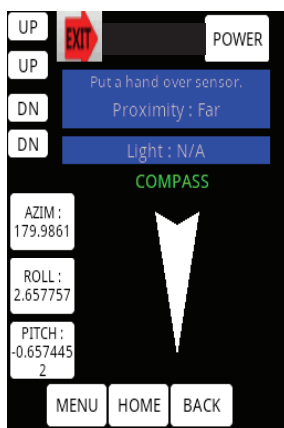
-> Ear Phone : **No** connecting is PASS

-> Charing Mode : connecting is PASS



2D LCD Display Test

Check Black & White Color



Key Press Test

Check below Items

Up/Down key : Hard Key

Power key : Hard Key

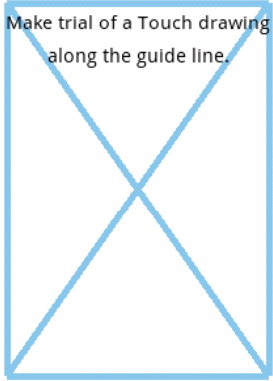
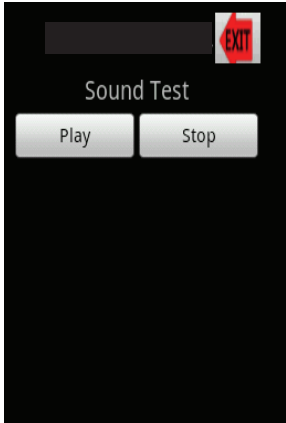

Menu key : Touch Key

Home key : Hard Key

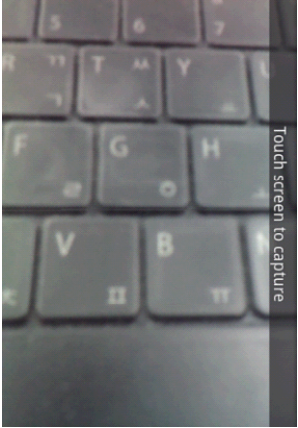
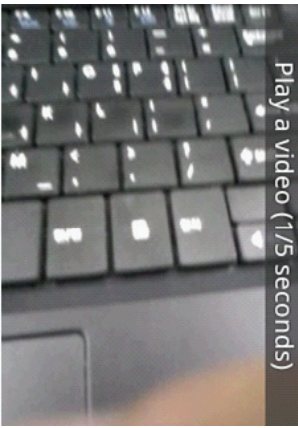
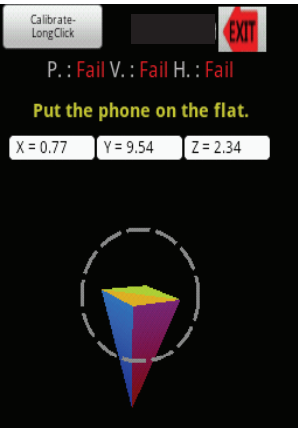
Back key : Touch Key

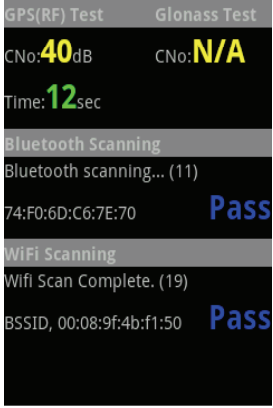
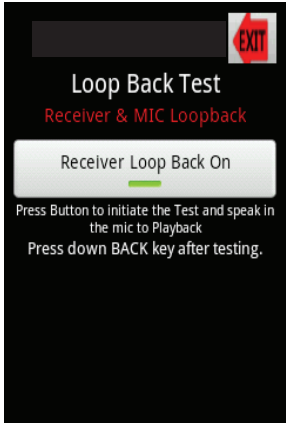
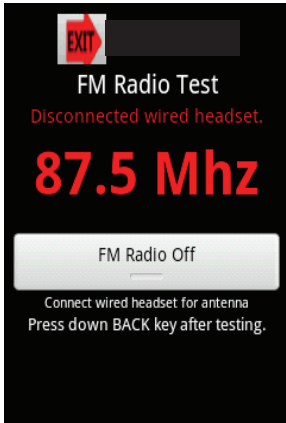
Compass Sensor : Check North

Proximity Sensor : Bilnd the Proximity sensor

 <p>Make trial of a Touch drawing along the guide line.</p>	<p>Touch Drawing Test Draw a guide line</p>
 <p>Sound Test</p> <p>Play Stop</p>	<p>Sound Test Touch the "Play" icon</p>
 <p>Vibrator Test</p> <p>Vibrator On Vibrator Off</p> <p>5000 ms 7000 ms</p> <p>9000 ms 10000 ms</p> <p>15000 ms 20000 ms</p> <p>2Sec(On) - 1Sec(Off) Test</p> <p>Start Stop</p>	<p>Vibrator Test Touch the "Start" icon</p>

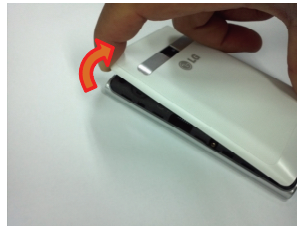
11. HIDDEN MENU

	<p>Camera Test – Snapshot</p> <p>Touch screen to capture</p>
	<p>Camera Test - Camcoding</p> <p>Camera is recoding for 5 seconds</p>
	<p>Motion Sensor Test</p> <p>Check 3 positions</p> <ul style="list-style-type: none">-> Position horizontally-> Position Vertically-> Position side

 <p>The screenshot shows a black background with white and yellow text. At the top, there are two tabs: 'GPS(RF) Test' and 'Glonass Test'. Below 'GPS(RF) Test', it says 'CNo: 40dB' and 'Time: 12sec'. Below 'Glonass Test', it says 'CNo: N/A'. There are two more sections: 'Bluetooth Scanning' showing 'Bluetooth scanning... (11)' and '74:F0:6D:C6:7E:70' with a 'Pass' status, and 'WiFi Scanning' showing 'Wifi Scan Complete. (19)' and 'BSSID, 00:08:9f:4b:f1:50' with a 'Pass' status.</p>	<p>GPS BT Wifi Test</p> <p>GPS(RF) test : CNO is some value : OK Bluetooth Scanning is PASS : OK WiFi Scanning is PASS : OK</p>
 <p>The screenshot shows a black background with white and red text. At the top, there is a red 'EXIT' button. Below it, the title 'Loop Back Test' is displayed, followed by 'Receiver & MIC Loopback'. A large button labeled 'Receiver Loop Back On' is in the center. Below the button, it says 'Press Button to initiate the Test and speak in the mic to Playback' and 'Press down BACK key after testing.'</p>	<p>Sound Loopback Test</p> <p>"Look Back On" is test mode on "Look Back OFF" is test mode off</p>
 <p>The screenshot shows a black background with white and red text. At the top, there is a red 'EXIT' button. Below it, the title 'FM Radio Test' is displayed, followed by 'Disconnected wired headset.' and '87.5 Mhz' in large red font. A large button labeled 'FM Radio Off' is in the center. Below the button, it says 'Connect wired headset for antenna' and 'Press down BACK key after testing.'</p>	<p>FM Radio Test</p> <p>87.5 Mhz is scanned automatically -> Connect ear-jack -> Touch "FM Radio Off" icon</p>

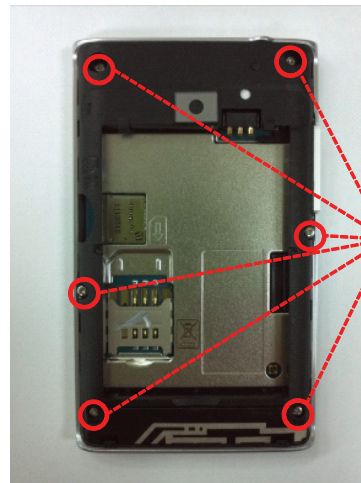
12.DISASSEMBLE GUIDE

1. Disassemble Battery Cover



Take apart the battery cover using notches below.

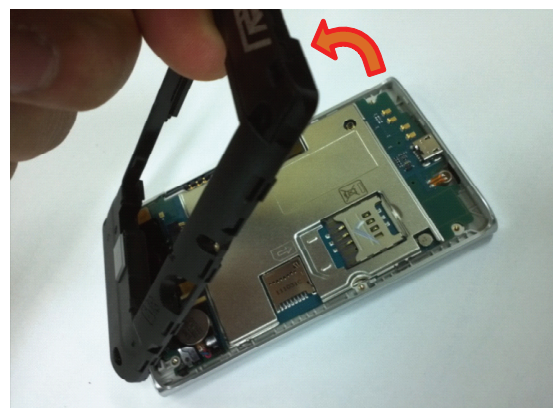
2. Disassemble Battery & Screw



Screw rear (Silver)

Take apart the battery and remove screw (6points)

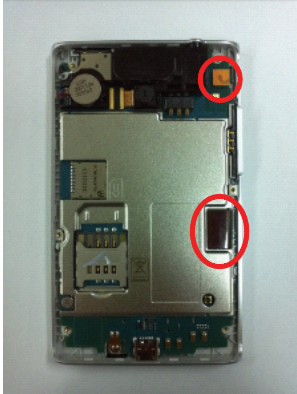
3. Disassemble Rear Cover



Hook off the bottom of Front cover

Take apart the Rear cover out of Front cover starting from bottom

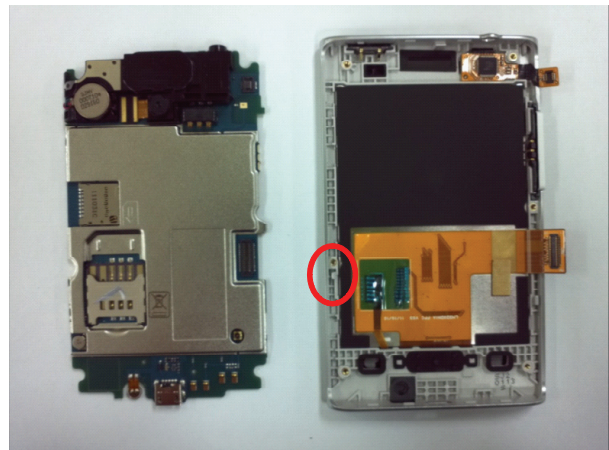
4. Disassemble Main PCB



Take the FPCB out of main PCB

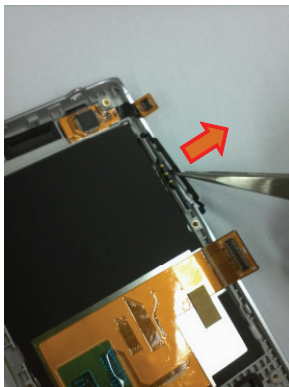


Widen the gap between Front cover and main PCB and hook off

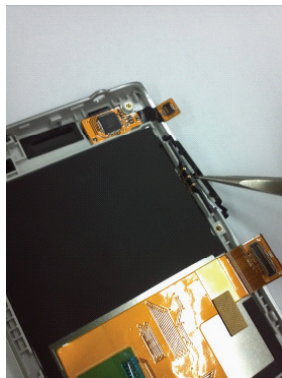


Hook off the left side for disassembling Main PCB

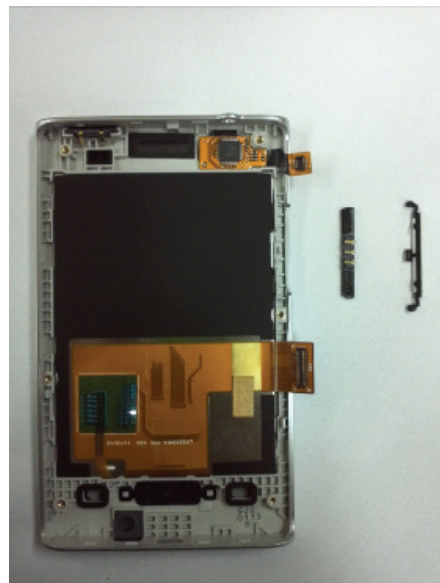
5. Disassemble Side volume key & Contact Dome



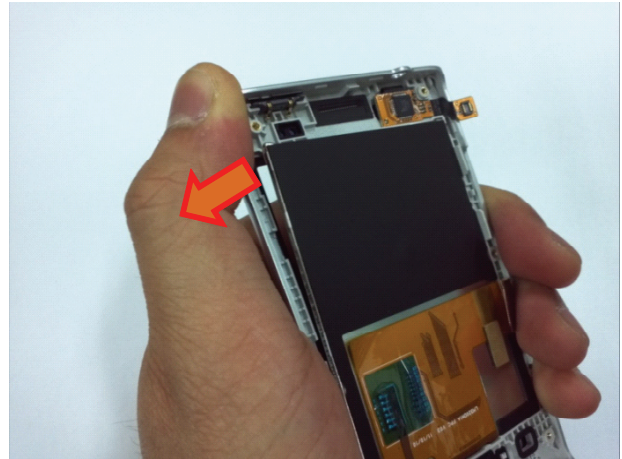
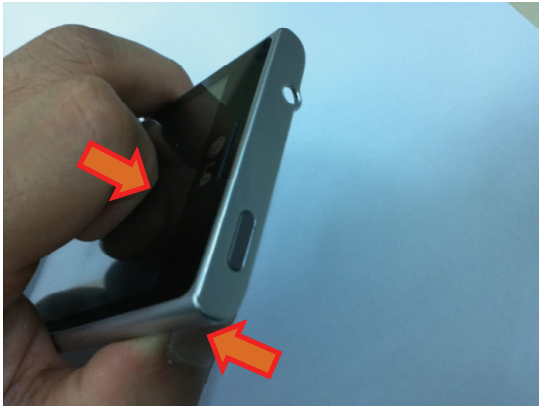
Pull Side key to the right side



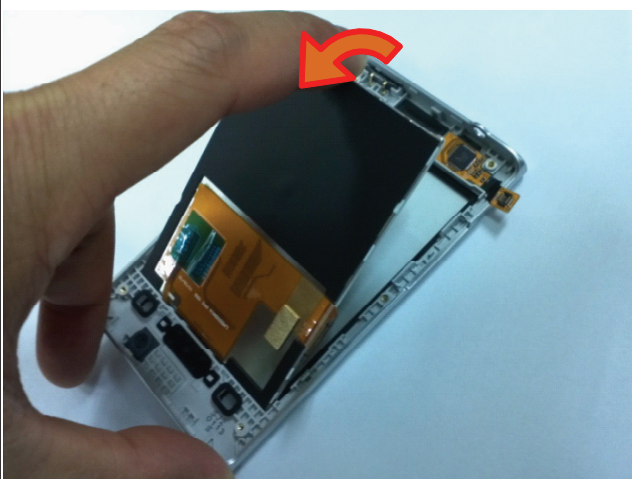
Detach the contact dome out of Front cover



6. Disassemble LCD

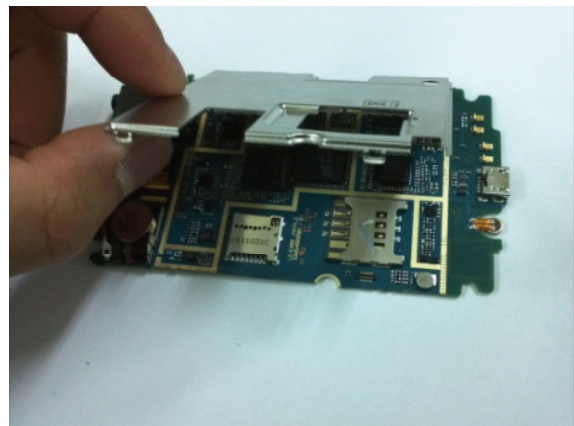
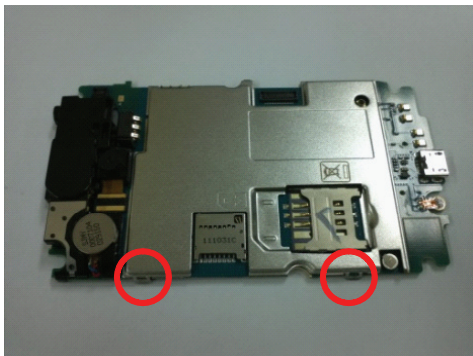


Hold the touch window and Push the left side of front cover (Back view)



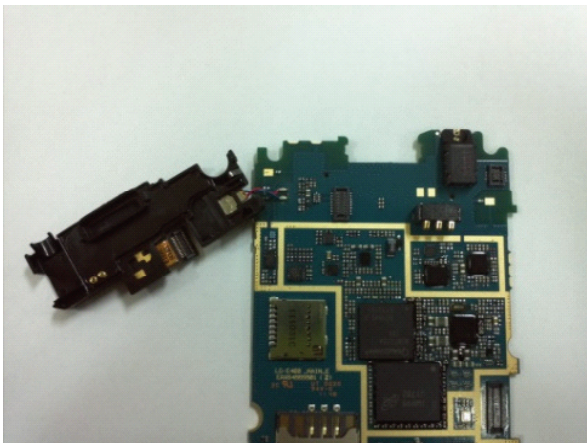
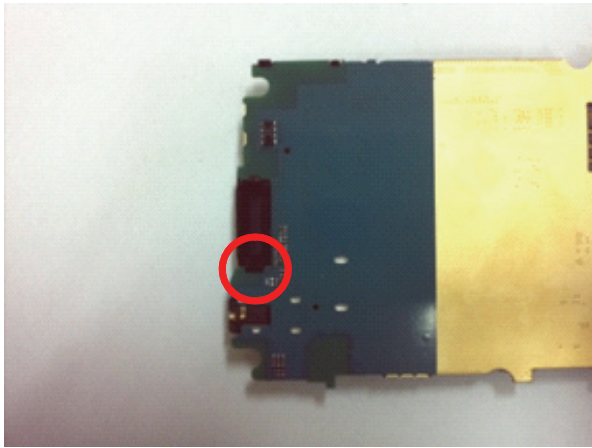
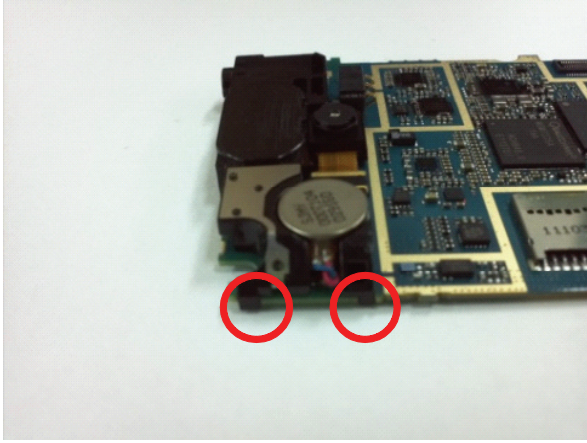
Take apart the LCD out of Front cover
Tip : Easy to take apart the LCD module from top side

7. Disassemble Shield Can & Speaker module



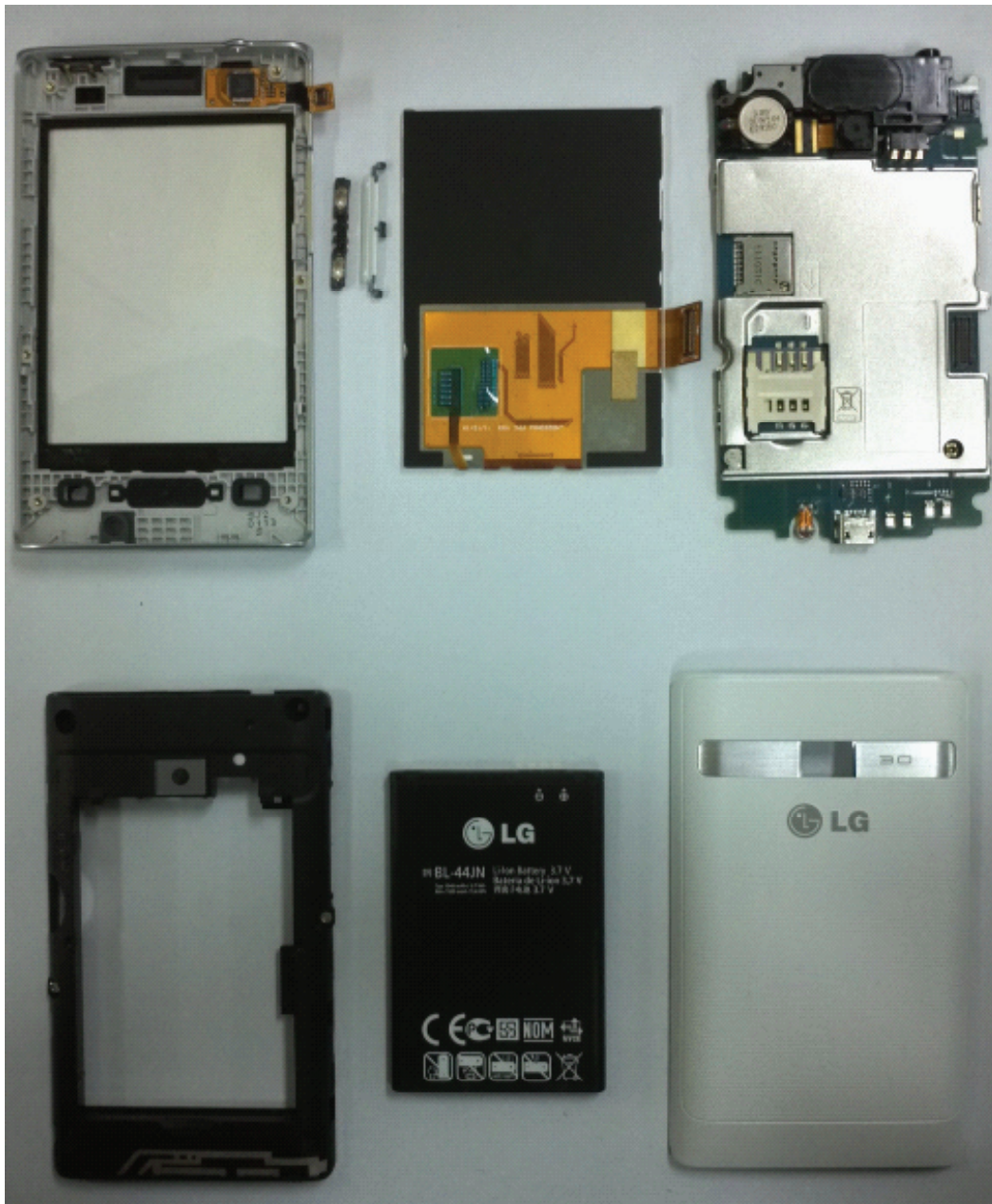
Hook off the notches below (2points) and pull on the other side

12. DISASSEMBLE GUIDE



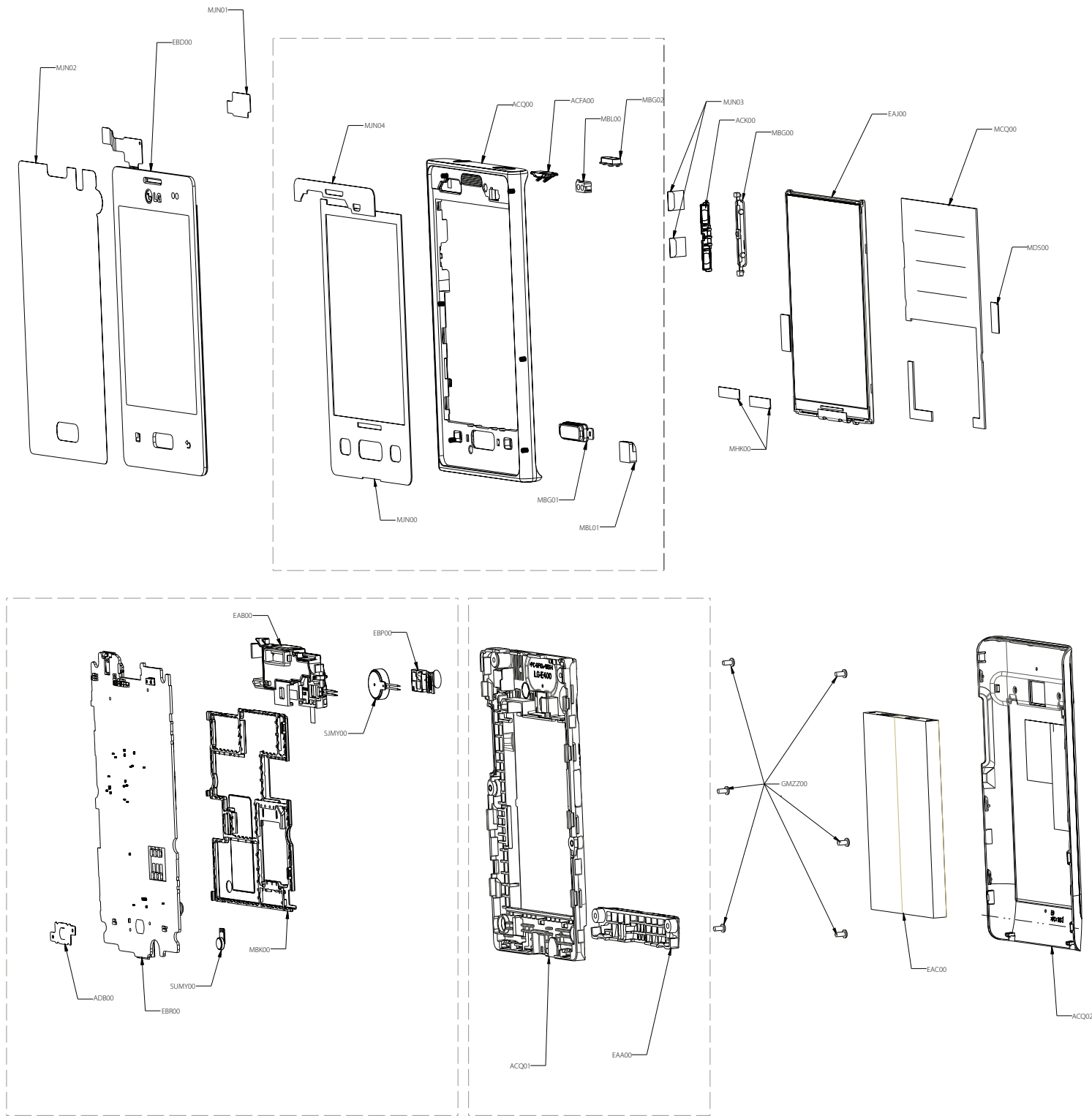
Hook off the notches below (3points) and detach the speaker module out of main PCB

10. Complete disassembling E400



13. EXPLODED VIEW & REPLACEMENT PART LIST

13.1 EXPLODED VIEW(SBOM)



Location	Description
ACK00	Contact Assembly
EAJ00	LCD Module
EBD00	Touch Window Assembly
MBG00	Button, Side
ACQ00	Cover Assembly, Front
ACFA00	Contact Assembly, Side Button
MBG01	Button
MUN04	Tape, Window
MUN00	Tape, Window
MBL00	Cap
MBL01	Cap
MBG02	Button, Side
MUN01	Tape
MUN02	Tape, Protect
MD500	Gasket
MHK00	Sheet
MUN03	Tape
MCQ00	Damper, LCD
ACQ01	Cover Assembly, Rear
EAA00	PIFA Antenna, Multiple
EBR00	PCB Assembly, Main
EAB00	Speaker Module
MBK00	Can, Shield
ADB00	Dome Assembly, Metal
EBP00	Camera Module
SUMY00	Microphone, Condenser
SJMY00	Motor, DC
GMZZ00	Screw, Machine
ACQ02	Cover Assembly, Battery
EAC00	Rechargeable Battery, Lithium Ion

13. EXPLODED VIEW & REPLACEMENT PART LIST

13.2 ReplacementParts <Mechanic component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	LocationNo.	Description	PartNumber	Spec	Remark
1	AGQ000000	Phone Assembly	AGQ86786901	LGE400.AITAWH WH:WHITE WHITE -	
2	MEZ002100	Label,Approval	MLAA0062316	COMPLEX GU280 OREBK ZZ:Without Color COMPLEX, (empty), , , ,	
2	ACQ100400	Cover Assembly,EMS	ACQ86033001	LGE400.AITAWH WH:WHITE WHITE -	
3	ACQ003400	Cover Assembly,Bar	ACQ85995101	LGE400.ABUOWH BS:Bright Silver -	
4	ACK00	Contact Assembly	ACK73029001	LGMS840.AMTPTG BK:Black -	
4	MBG00	Button,Side	MBG64527701	MOLD PC LGE400.ABUOWH WH:WHITE WHITE -	
4	MEZ000000	Label	MLAZ0038303	COMPLEX LG-LC3200 WA:White PRINTING, PPRI PRINTING	
4	ACQ00	Cover Assembly,Front	ACQ85906701	LGE400.ABUOWH BS:Bright Silver -	
5	ACFA00	Contact Assembly Side Button	ACFA0000301	i-Common ZZZBK ZZ:Without Color 1Button Type	
5	MBG01	Button	MBG64527901	MOLD ACRYL LGE400.AITABK BK:BLACK BLACK Home Button	
5	MET099501	INSERT,NUT	MICE0016903	MECH_COMMON ZY,ZZ,PRESS, STS, , , ,	
5	MET099500	INSERT,NUT	MICE0016902	MECH_COMMON ZY,ZZ,PRESS, STS, , , ,	
5	MJN04	Tape,Window	MJN68115101	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
5	MJN00	Tape,Window	MJN68077301	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
5	MDJ000000	Filter	MDJ63426201	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
5	MDJ000001	Filter	MDJ63405801	COMPLEX LGE400.ADEUSK ZZ:Without Color -	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
5	MCQ074200	Damper,Speaker	MCQ66954101	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
5	MCK032700	Cover,Front	MCK67054201	MOLD PC GP-1000 LGE400.ABUOWH BS:Bright Silver -	
5	MBL00	Cap	MBL65281901	MOLD SILCON RUBBER LGE400.AITABK ZZ:Without Color -	
5	MBL01	Cap	MBL65222501	MOLD SILICON RUBBER LGE400.AITABK ZZ:Without Color -	
5	MJN000001	Tape	MJN68143901	COMPLEX LGE400.ABUOWH ZZ:Without Color -	
5	MBG02	Button,Side	MBG64527801	MOLD PC LGE400.ABUOWH TN:TITAN TITAN Power Button	
4	MJN01	Tape	MJN68077501	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
4	MJN02	Tape,Protect	MJN68082301	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
4	MDS00	Gasket	MDS63919401	COMPLEX LGE400.ABUOWH GG:Gold Gray E400_GASKET_LCD	
4	MHK00	Sheet	MHK63734801	COMPLEX LGE400.AITABK ZZ:Without Color -	
4	MJN03	Tape	MJN68096401	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
4	MCQ00	Damper,LCD	MCQ66992301	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
3	ACQ01	Cover Assembly,Rear	ACQ85906401	LGE400.ABUOWH ZZ:Without Color -	
4	MCQ015700	Damper Connector	MCQ66954801	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
4	MCQ000000	Damper	MCQ66970501	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
4	MCQ015701	Damper Connector	MCQ66973701	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
4	MCQ049800	Damper,Motor	MCQ66992701	COMPLEX LGE400.ADEUSK ZZ:Without Color -	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
4	MJN089300	Tape,Window	MJN68077701	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
4	MKC009400	Window,Camera	MKC64322201	CUTTING ACRYL LGE400.ABUOWH SV:Silver -	
4	MEZ000900	Label,After Service	MEZ64319901	COMPLEX LGF120L.ALGTWA ZZ:Without Color F120I AS Label	
4	MBF000000	Bush	MBF62844201	PRESS STS 1.8 LGE400.AITABK ZZ:Without Color -	
4	MCK063300	Cover,Rear	MCK67054401	MOLD PC GP-1000 LGE400.ADEUSK BK:BLACK BLACK -	
4	MCQ009400	Damper,Camera	MCQ66915401	COMPLEX LGE400.ADEUSK WP:White Pearl -	
5	MBK00	Can,Shield	MBK63273601	PRESS STS 0.3t LGE400.AITABK ZZ:Without Color -	
5	ADB00	Dome Assembly,Metal	ADB73818401	LGE400.ADEUSK ZZ:Without Color -	
6	ANT100 ANT105	Contact	MCIZ0008401	COMPLEX LG-C900 ATTDW ZZ:Without Color PRESS, BeCu, , 3.0, 1.2, 1.5,	
5	MEZ000000	Label	MLAZ0038301	COMPLEX LG-VX6000 ZZ:Without Color PID Label 4 Array PRINTING,	
3	GMZZ00	Screw,Machine	GMZZ0017701	GMZZ0017701 BH + 1.4mM 3mM MSWR NI PLT N - ASIA BOLT	
1	AGF000000	Package Assembly	AGF76460301	LGE400.AITABK ZZ:Without Color LGE400 ITA (S6T/ITA UB) 800ea/Pallet	
2	MFZ005500	Packing,B blister	MFZ63334403	MOLD PS LGE400.AITABK ZZ:Without Color LGE400 PS Tray	
2	MEZ003500	Label,Barcode	MLAC0004541	PRINTING HB620 KPNBK ZZ:Without Color GSM standard_unit box label_90*40	
2	MEZ047200	Label,Master Box	MLAJ0004402	PRINTING CG300 CGR DG ZZ:Without Color LABEL MASTER BOX(for CGR TDR 2VER. mbox_label) GSM standard_master box label	
2	MAY047100	Box,Master	MBEE0061004	COMPLEX LGE730.ANLDKT ZZ:Without Color S6T_STD Master Box(10EA)	
2	MAY084000	Box,Unit	MAY65496601	COMPLEX LGE400.AITABK ZZ:Without Color LGE400 ITA UNIT BOX(S6T)	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
2	MEZ000000	Label	MLAZ0050901	COMPLEX KU990.AGBRBK ZZ:Without Color Battery Warning Label (Lithium ion Battery Label)	
2	AGJ000000	Pallet Assembly	AGJ73458301	LGE730.ANLDKT ZZ:Without Color S6T Type_Body+Cap+AL(1200x800)_800EA	
3	MBL007000	Cap,Box	MCCL0002604	COMPLEX LGE730.ANLDKT ZZ:Without Color S6T-STD Cap(800EA/1200*800)	
3	MAY010800	Box, Carton	MBEC0004404	COMPLEX LGE730.ANLDKT ZZ:Without Color S6T-STD Body(800EA/1200*800)	
3	MCQ000000	Damper	MCQ66486907	COMPLEX LGE730.ANLDKT ZZ:Without Color S6T-STD Dead Space Sleeve(800EA/1200*800)	
3	MGA000000	Pallet	MPCY0012403	COMPLEX KG800 FRABK DB:DARK BLUE -	
1	AAD000000	Addition Assembly	AAD86070101	LGE400.AITAWH WH:WHITE WHITE -	
2	ACQ02	Cover Assembly,Battery	ACQ85921901	LGE400.ABUOWH WH:WHITE WHITE -	
3	MCK004100	Cover,Battery	MCK67054301	MOLD PC LGE400.ABUOWH WH:WHITE WHITE -	
3	MCR000000	Decor	MCR64753301	COMPLEX LGE400.ABUOWH SV:Silver Camera Decor	
3	MCR000001	Decor	MCR64753311	COMPLEX LGE400.ABUOWH SV:Silver Camera Decor	
3	MJN020800	Tape,Decor	MJN68078001	COMPLEX LGE400.ADEUSK ZZ:Without Color -	
2	AFN053800	Manual Assembly Operation	AFN75738801	LGE400.AITABK ZZ:Without Color LG-E400 Manual Assy for ITA	
2	MEZ000000	Label	MLAZ0051201	COMPLEX KP170 ITASV ZZ:Without Color -	

13. EXPLODED VIEW & REPLACEMENT PART LIST

13.2 ReplacementParts <Main component>

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	LocationNo.	Description	PartNumber	Spec	Remark
4	EAJ00	LCD Module	EAJ62130001	LM320DN1A QVGA 3.2INCH 240X320 400CD COLOR 60% 4/3 500 60Hz Inverter N LED 2D - TOVIS	
4	EBD00	Touch Window Assembly	EBD61365501	LT320YF2A CAPACITIVE TOUCH PFF Melfas MMS128 3.2' BTOB - TOVIS	
4	EAA00	PIFA Antenna,Multiple	EAA62787401	LG3368-16-000-C QUAD -5DB 5.0:1 LDS Type - SHANGHAI AMPHENOL AIRWAVE	
4	EAA030100	PIFA Antenna Bluetooth	EAA62787501	LS01-I-11088A0 SINGLE -5DB 5.0:1 Metal Stamping Type - LS Mtron Ltd.	
3	EBR00	PCB Assembly,Main	EBR75147501	LGE400.AITABK 1.0 Main	
4	EBR071500	PCB Assembly Main,Insert	EBR75266601	LGE400.AITABK 1.0 Main	
5	EAB00	Speaker Module	EAB62672101	18108-8T-28MP Nd-Fe-B 700mW 8OHM 90DB 700HZ 55.6*20.59*4.45, 1810 3t SPK+ANT(SUB) enclosure, spring SPRING KIRYN TELECOM CO., LTD	
5	EBP00	Camera Module	EBP61581801	CW3033-A99CC CW3033-A99CC 3M FF Hynix 1/5" FPC 90deg. 3.5mm MIPI type COWELL ELECTRONICS CO.,LTD	
5	RAA050100	Resin,PC	BRAH0001301	UF2040 or 3075BHF . . NONE	
5	SUMY00	Microphone Condenser	SUMY0003816	OBM-410L44-RC1882 -44DB 2.2KOHM OMNI 1TO10V 4x1.0t FPCB BSE CO., LTD.	
5	SJMY00	Motor,DC	SJMY0007104	3V 80mA 0A 12KRPM 0RPM 0SEC 0GF.CM 0OHM	
4	EBR071800	PCB Assembly Main,SMT	EBR75220101	LGE400.AITABK 1.0 Main	
5	EBR071600	PCB Assembly Main,SMT Bottom	EBR74703001	LGE400.ADEUSK 1.1 Main	
6	C914	Capacitor Ceramic,Chip	ECCH0000175	GRM1555C1H2R7B 2.7pF 0.1PF 50V NP0 - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	R316	Resistor,Chip	ERHY0009504	MCR006YZPJ102 1KOHM 5% 1/20W 0603 R/TP - ROHM.	
6	R310	Resistor,Chip	ERHZ0000249	MCR01MZP5F22R0 22OHM 1% 1/16W 1005 R/TP - ROHM.	
6	C138	Inductor Multilayer,Chip	ELCH0004713	1005GC2T6N8JLF 6.8NH 5% - 250mA 0.32OHM 3GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	C199	Inductor Multilayer,Chip	ELCH0004711	1005GC2T22NJLF 22NH 5% - 200mA 0.8OHM 1.5GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	C181	Inductor Multilayer,Chip	ELCH0004709	1005GC2T3N3SLF 3.3NH 0.3NH - 300mA 0.19OHM 4.5GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	C1021	Inductor Multilayer,Chip	ELCH0003832	LQG15HS2N2S02D 2.2NH 0.3NH - 300mA - - 0.12OHM 6GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	L128	Inductor Multilayer,Chip	ELCH0001406	LL1005-FHL4N7S 4.7NH 0.3NH - 300mA 0.2OHM 7GHZ 9 SHIELD NONE 1.0X0.5X0.5MM R/TP TOKO, INC.	
6	L121	Inductor Multilayer,Chip	ELCH0003820	LQG15HS3N0S02D 3NH 0.3NH - 300mA 0.17OHM 6GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	R610	Resistor,Chip	ERHZ0000478	MCR01MZP5J3R3 3.3OHM 5% 1/16W 1005 R/TP - ROHM.	
6	U901	IC,WiFi	EAN62416201	WCN1314-0-87WLN5P-TR-0D WCN1314 Revision version, WiFi(11bgn) single band, 3.95x4.16x0.63, 0.4pitch, 65nm, WLCSP R/TP 87P QUALCOMM INCORPORATED.	
6	C1004 C1016	Capacitor Ceramic,Chip	ECCH0000901	C1005C0G1H2R2CT000F 2.2pF 0.25PF 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	R201 R212 R220 R309 R403 R715	Resistor,Chip	ERHZ0000405	MCR01MZP5J103 10KOHM 5% 1/16W 1005 R/TP - ROHM.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C300 C301 C302 C316 C326 C327 C328 C329 C330 C331 C332 C333 C334 C335 C336 C337 C338 C339 C340 C341 C343 C344 C345 C346 C347 C348 C349 C350 C351 C352 C353 C354 C355 C356	Capacitor Ceramic,Chip	ECZH0001217	GRM155R60J474K 470nF 10% 6.3V X5R - 25TO+70C 1005 BK-DUP - MURATA MANUFACTURING CO.,LTD.	
6	C357 C358 C359 C360 C361 C362 C363 C364 C365 C366 C514	Capacitor Ceramic,Chip	ECZH0001217	GRM155R60J474K 470nF 10% 6.3V X5R - 25TO+70C 1005 BK-DUP - MURATA MANUFACTURING CO.,LTD.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C306 C311 C312 C317 C322 C323 C444 C445 C446 C447 C460 C506 C507 C508 C509 C511 C512 C700 C714 C715 C719 C723 C724 C725 C935 C943	Capacitor Ceramic,Chip	ECCH0000198	CL05A225MQ5NSNC 2.2uF 20% 6.3V X5R - 55TO+85C 1005 R/TP . SAMSUNG ELECTRO- MECHANICS CO., LTD.	
6	U104	IC,RF Amplifier	SMZY0025501	RF2815 3.3*2.1*1.0,FILTER+GPS LNA+FILTER MODULE,GPS, RF MICRO DEVICES INC	
6	FL500 FL501 FL502 FL503 FL504	Filter,EMI/Power	SFEY0010501	ICVE10184E150R101FR ESD/EMI 0HZ 15pF 0H SMD R/TP INNOCHIPS TECHNOLOGY	
6	C400 C406 C407 C408 C413 C426 C500 C502	Capacitor Ceramic,Chip	ECZH0001215	C1005X5R1A105KT000F 1uF 10% 10V X5R - 55TO+85C 1005 R/TP - TDK KOREA COOPERATION	
6	L118	Inductor Multilayer,Chip	ELCH0003844	LQG15HS2N0S02D 2NH 0.3NH - 300mA 0.1OHM 6GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	R112 R114	Resistor,Chip	ERHZ0000415	MCR01MZP5J131 130OHM 5% 1/16W 1005 R/TP - ROHM.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C124 C126 C127 C128 C129 C133 C147 C149 C151 C152 C154 C155 C156 C157 C158 C159 C160 C168 C169 C193 C207 C208 C209 C210 C212 C214 C215 C216 C225 C228 C303 C313 C314 C315	Capacitor Ceramic,Chip	ECCH0002001	C1005JB0J104KT000F 0.1uF 10% 6.3V Y5P - 30TO+85C 1005 R/TP - TDK CORPORATION	
6	C420 C425 C428 C466 C601 C602 C701 C711 C717 C803 C925 C929 C931	Capacitor Ceramic,Chip	ECCH0002001	C1005JB0J104KT000F 0.1uF 10% 6.3V Y5P - 30TO+85C 1005 R/TP - TDK CORPORATION	
6	U500	IC,Sub PMIC	EAN62334401	BU61800GWL 2.7 to 5.5V adj 0W CSP R/TP 25P - ROHM Semiconductor KOREA CORPORATION	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C401 C465	Capacitor Ceramic,Chip	EAE62505701	CL10A105KB8NNNC 1uF 10% 50V X5R - 55TO+85C 1608 R/TP 0.9T max. SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	R800 R801 R802 R803 R804	Resistor,Chip	ERHY0000147	MCR01MZIP5F5602 56KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	C104 C1045 C1047 C1048 C105 C1051 C109 C118 C120 C139 C167 C170 C184 C185 C200 C201 C433 C902 C941 C942 C946 L102 L110 L130	Capacitor,Ceramic, Chip	ECZH0000813	C1005C0G1H101JT 100pF 5% 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	R116	Resistor,Chip	ERHZ0000509	MCR01MZIP5J750 75OHM 5% 1/16W 1005 R/TP - ROHM.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	R1 R102 R103 R106 R109 R110 R111 R128 R2 R3 R300 R311 R313 R314 R4 R405 R406 R416 R417 R424 R426 R428 R709	PCB ASSY,MAIN PAD SHORT	SAFP0000401	LG-LU3000 LGTBK,MAIN,A,	
6	R218 R221	PCB ASSY,MAIN PAD OPEN	SAFO0000401	AX3100 ATL SV_SHIPBACK,MAIN,A,0OHM DNI	
6	R123 R124	Resistor,Chip	ERHZ0000408	MCR01MZP5J111 110OHM 5% 1/16W 1005 R/TP - ROHM.	
6	U100	IC,RF Transceiver,3G	EAN62090401	RTR6285A GSM/EDGE/3G Quad with MSM7227A CSP R/TP 137P QUALCOMM INCORPORATED.	
6	D400 VA501 VA502 VA503 VA504 VA700 VA701 VA806 VA807 VA808 VA809 VA810 VA811	Varistor	SEVY0004301	ICVL0518100Y500FR 18V 0% 10F 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C416 C418 C421 C422 C423 C424 C427 C431	Capacitor Ceramic,Chip	ECZH0003103	GRM36X7R104K10PT 100nF 10% 10V X7R - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	C211 C213 C304 C307 C308 C309 C310 C318 C319 C320 C321 C324 C405 C441 C442 C443 C448 C449 C450 C451 C452 C453 C454 C455 C456 C457 C458 C459 C501 C510 C605 C728 C805 C926	Capacitor Ceramic,Chip	ECCH0004904	GRM155R60J105K 1uF 10% 6.3V X5R -55TO+85C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	VA800 VA801 VA802 VA803 VA804 VA805 VA812 VA813 VA814 VA815	Varistor	SEVY0005101	ICVL0518050FR 18V 0% 5F 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	R809 R811 R812 R813 R814	Resistor,Chip	ERHZ0000285	MCR01MZP5F4700 470OHM 1% 1/16W 1005 R/TP - ROHM.	
6	U402	IC,PMIC	EAN62090501	PM8029 3 to 4.4V adj 1.3W NSP R/TP 140P - QUALCOMM INCORPORATED.	
6	BAT400	Capacitor Assembly	SMZY0023501	PAS311HR-VG1 3.8 Backup Capacitor 0.03F,Module Assembly, KOREA TAIYO YUDEN.CO., LTD.	
6	C1024 C713 C721	Capacitor Ceramic,Chip	ECCH0000120	MCH155A390J 39pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C106 C108 C217 C917 C918 C919 C923 C924 C928 C938 C940	Capacitor Ceramic,Chip	ECCH0000155	MCH153CN103KK 10nF 10% 16V X7R - 55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	CN501	Connector,BtoB	ENBY0034201	GB042-24S-H10-E3000 24P 0.40MM STRAIGHT SOCKET SMD R/TP 1M - LS Mtron Ltd.	
6	C174 C187	Capacitor Ceramic,Chip	ECCH0005603	GRM188R61A225K 2.2uF 10% 10V X5R - 55TO+85C 1608 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	U102	IC,Power Amplifier	SMPY0020702	ACPM-5201-LR1 dBm,%,A,dBc,dB,3.0*3.0*1.1,SMD,WBAND 1,CPL,3 MODE,BYPASS CLAMPING,SMD,R/TP, AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED	
6	L119 L123	Inductor Multilayer,Chip	ELCH0001412	LL1005-FHL1N8S 1.8NH 0.3NH - 400mA 0.14OHM 15GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP TOKO, INC.	
6	L115 L903	Inductor Multilayer,Chip	ELCH0003828	LQG15HS2N4S02D 2.4NH 0.3NH - 300mA 0.15OHM 6GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C1044 C227 C910	Capacitor Ceramic,Chip	ECCH0000122	MCH155A470JK 47pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C412 C503	Capacitor Ceramic,Chip	ECCH0007803	CL10A106MP8NNNC 10uF 20% 10V X5R - 55TO+85C 1608 R/TP 0.8MM SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C410 C411 C414 C702	Capacitor Ceramic,Chip	EAE62506501	CL05A475MP5NRNC 4.7uF 20% 10V X5R - 55TO+85C 1005 R/TP - SAMSUNG ELECTRO- MECHANICS CO., LTD.	
6	R415	Resistor,Chip	ERHZ0000493	MCR01MZIP5J513 51KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	C229	Capacitor,TA,Confo rml	ECTH0001903	F980J226MMA 22uF 20% 6.3V 1.4UA -55TO+125C 8OHM 1.6X0.85X0.8MM NONE SMD R/TP 0.9T max. NICHICON CORPORATION, EAST JAPAN SALES OFFICE	
6	R210 R211	Resistor,Chip	ERHZ0000522	MCR01MZIP5J240 24OHM 5% 1/16W 1005 R/TP - ROHM.	
6	FB700 FB701 FB707 FB708	Filter,Bead	SFBH0008101	BLM15AG601SN1D 600 ohm 1.0X0.5X0.5 25% 0.6 ohm 0.3A SMD R/TP 2P 0 MURATA MANUFACTURING CO.,LTD.	
6	R503	Resistor,Chip	ERHZ0000201	MCR01MZIP5F1000 100OHM 1% 1/16W 1005 R/TP - ROHM.	
6	C113 C123 C206 C707 C708 C937	Capacitor Ceramic,Chip	ECCH0000143	MCH155CN102KK 1nF 10% 50V X7R -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	D200	Diode,Switching	EAH61532901	BA891_ 1V 35V - - 0SEC 715mW SOD523 R/TP 2P 1 NXP Semiconductors	
6	CN800	Socket,Card	EAG62830201	104031-0811 SD 8P ANGLE SMD R/TP 11.95x11.40x1.42t, Push-pull type MOLEX	
6	C112 C136 C194 C226 C409 C804 L120	Capacitor Ceramic,Chip	ECZH0000830	C1005C0G1H330JT000F 33pF 5% 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	U200	IC,Digital Baseband Processor,3G	EAN62405901	MSM7225A-1-AA 576NSP,ARMv7(800MHz),HSDPA(DL7.2Mbps only), HVGA LCD, VGA30fps,5M,MIPI CSI_DSI NSP R/TP 576P QUALCOMM INCORPORATED.	
6	FL102	Filter,Saw	SFSY0035101	B9414 1950 1.4*1.1*0.45 SMD R/TP - EPCOS PTE LTD.	
6	R217 R315 R500	Resistor,Chip	ERHZ0000406	MCR01MZP5J104 100KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	C911 C912 C913 C920 C927	Capacitor Ceramic,Chip	ECCH0000110	MCH155A100D 10pF 0.5PF 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	CN600	Connector,BtoB	ENBY0051001	GB042-10S-H10-E3000 10P 0.4MM STRAIGHT FEMALE SMD R/TP 1M - LS Mtron Ltd.	
6	R702 R703 R808	Resistor,Chip	ERHZ0000402	MCR01MZP5J100 10OHM 5% 1/16W 1005 R/TP - ROHM.	
6	L901 R100	Inductor Multilayer,Chip	ELCH0001431	LL1005-FHL68NJ 68NH 5% - 180mA 1.7OHM 1.3GHZ 10 SHIELD NONE 1.0X0.5X0.5MM R/TP TOKO, INC.	
6	C325 C342 C436 C437 C438 C439 C939	Capacitor Ceramic,Chip	ECCH0017501	CL10A226MQ8NRNE 22uF 20% 6.3V X5R - 55TO+85C 1608 R/TP 0.8MM SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	R301 R302 R303 R304 R305 R306 R307 R308 R312	Resistor,Chip	ERHZ0000486	MCR01MZP5J473 47KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	C1006 C1007 C1091	Capacitor Ceramic,Chip	ECZH0000841	C1005C0G1H560JT000F 56pF 5% 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	L1006 L124	Inductor Multilayer,Chip	ELCH0003826	LQG15HS3N3S02D 3.3NH 0.3NH - 300mA - - 0.17OHM 6GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C190 C202	Capacitor Ceramic,Chip	ECZH0001002	C1005CH1H0R5BT000F 0.5pF 0.1PF 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	R901 R902	Resistor,Chip	ERHZ0000243	MCR01MZP5F2201 2.2KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	C204	Capacitor Ceramic,Chip	ECCH0001001	C1005C0G1H6R8CT000F 6.8pF 0.25PF 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	C178 C189 C195 L129	Inductor Multilayer,Chip	ELCH0004708	1005GC2T2N7SLF 2.7NH 0.3NH - 300mA 0.17OHM 5.5GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	C111 C901	Inductor Multilayer,Chip	ELCH0004720	1005GC2T1N2SLF 1.2NH 0.3NH - 300mA - - 0.12OHM 9GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	R206 R607	Resistor,Chip	ERHZ0000206	MCR01MZP5F10R0 10OHM 1% 1/16W 1005 R/TP - ROHM.	
6	VA500	Varistor	SEVY0001001	EVLC14S02050 14V 0% 50F 1.0*0.5*0.6 NONE SMD R/TP AMOTECH CO., LTD.	
6	C1092 C166 C402 C404 C432 C801 C802 C904	Capacitor Ceramic,Chip	ECCH0000115	MCH155A220JK 22pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	L902 L904	Inductor Multilayer,Chip	ELCH0001425	LL1005-FHL82NJ 82NH 5% - 150mA 1.9OHM 1.15GHZ 10 SHIELD NONE 1.0X0.5X0.5MM R/TP TOKO, INC.	
6	FL400	Filter,EMI/Power	SFEY0015301	NFM18PC104R1C3 ESD/EMI 0HZ 0.1uF 0H SMD R/TP MURATA MANUFACTURING CO.,LTD.	
6	R419	Resistor,Chip	ERHY0000140	MCR01MZP5F3602 36KOHM 1% 1/16W 1005 R/TP - ROHM.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C1036 C1040	Inductor Multilayer,Chip	ELCH0001036	HK1005 5N6S-T 5.6NH 0.3NH - 300mA 0.23OHM 4GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP TAIYO YUDEN CO.,LTD	
6	FB900	Filter,Bead	EAM62471001	BLM03AX241SN1D 240 ohm 0.6X0.3X0.33 25% 0.38 ohm 0.35A SMD R/TP 2P 0 MURATA MANUFACTURING CO.,LTD.	
6	C198 L1011 L1014	Capacitor Ceramic,Chip	EAE62621801	C1005NPO758CGTQ 0.75pF 0.25PF 50V C0G - 55TO+125C 1005 R/TP 0.55MM DARFON ELECTRONICS CORP.	
6	R122 R412 R413	Resistor,Chip	ERHY0000105	MCR01MZIP5F51R0 51OHM 1% 1/16W 1005 R/TP - ROHM.	
6	L126 L906	Inductor Multilayer,Chip	ELCH0004727	1005GC2TR10JLF 100NH 5% - 100mA 2.3OHM 600MHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	R107 R202 R506 R507 R701 R706 R714	Resistor,Chip	ERHZ0000443	MCR01MZIP5J222 2.2KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	FL104	Filter,Saw	SFSY0037601	B9442 897.5MHz 1.4*1.1*0.4 SMD R/TP 5P EPCOS PTE LTD.	
6	R204 R704 R705 R810	Resistor,Chip	ERHY0003301	MCR01MZIP5J101 100OHM 5% 1/16W 1005 R/TP - ROHM.	
6	R401 R402 R501 R502 R608 R609 R613 R614 R707 R708	Resistor,Chip	ERHY0000254	MCR01MZIP5J472 4.7KOHM 5% 1/16W 1005 R/TP - ROHM.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C148 C150 C153 C161 C513 C607 C921 C922 C930	Capacitor Ceramic,Chip	ECCH0017601	CL05A475MQ5NRNC 4.7uF 20% 6.3V X5R - 55TO+85C 1005 R/TP 0.5MM SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C504 C505	Capacitor Ceramic,Chip	ECCH0007804	CL05A225MP5NSNC 2.2uF 20% 10V X5R - 55TO+85C 1005 R/TP 0.5MM SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C134 C604 C720	Capacitor Ceramic,Chip	ECCH0005604	GRM188R60J106M 10000000 pF,6.3V,M,X5R,TC,1608,R/TP,0.8 mm MURATA MANUFACTURING CO.,LTD.	
6	L400 L401	Inductor,Wire Wound,Chip	ELCP0009409	LQM2HPN2R2MG0L 2.2UH 20% - 600mA 0.6 1.3 0.08OHM - - SHIELD 2.5X2X1MM NONE R/TP MURATA MANUFACTURING CO.,LTD.	
6	C1041 C915	Inductor Multilayer,Chip	ELCH0003847	LQG15HS1N8S02D 1.8NH 0.3NH - 300mA 0.1OHM 6GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	C734 C936	Capacitor Ceramic,Chip	ECZH0001216	C1005X5R1A224KT000E 220nF 10% 10V X5R - 55TO+85C 1005 R/TP - TDK KOREA COOPERATION	
6	R404	Resistor,Chip	ERHZ0000444	MCR01MZP5J223 22KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	U301	IC,MCP,eMMC	EAN62335901	MT29KZZZ4D4RGFAK-5 W FLASH 1.7VTO1.95V,2.7VTO3.6V 11.5x13.0x1.0 TR 153P NAND+DRAM FBGA 4GB eMMC+4Gb LPDDR1 200MHz (25nm 16Gb MLCx2+50nm 2Gb2) MICRON SEMICONDUCTOR ASIA PTE LTD.	
6	L700 L701	Inductor Multilayer,Chip	ELCH0004717	1005GC2T82NJLF 82NH 5% - 150mA 2.1OHM 700MHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	C117	Capacitor Ceramic,Chip	ECZH0000846	C1005C0G1H8R2CT000F 8.2pF 0.25PF 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	CN701	Jack,Phone	EAG63070601	KJA-PH-4-0176 5P 2P ANGLE R/TP 3.5M BLACK 5P - KSD CO., LTD	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	FL505	Filter,EMI/Power	SFEY0015901	ICMEF214P101MFR ICMEF214P101MFR ICMEF214P101MFR,SMD ,ESD Common mode Filter INNOCHIPS TECHNOLOGY INNOCHIPS TECHNOLOGY	
6	R213	Resistor,Chip	ERHZ0000291	MCR01MZP5F49R9 49.9OHM 1% 1/16W 1005 R/TP - ROHM.	
6	C440	Capacitor Ceramic,Chip	ECCH0000149	MCH155CN332KK 3.3nF 10% 50V X7R - 55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	R712 R713 R900 R904	Resistor,Chip	ERHZ0000407	MCR01MZP5J105 1MOHM 5% 1/16W 1005 R/TP - ROHM.	
6	U700	IC,Comparator	EAN62065901	MAX14579E 2.5~5.5V 2uA COMPARATOR TDFN R/TP 8P Headset Jack Detection IC with LDO, 15kV ESD MAXIM INTEGRATED PRODUCTS INC.	
6	C933 C945	Capacitor Ceramic,Chip	ECCH0009103	C0603C0G1H101JT00NN 100pF 5% 50V C0G - 55TO+125C 0603 R/TP - TDK CORPORATION	
6	SW100	Connector,RF	ENWY0008701	MS-156C NONE STRAIGHT SOCKET SMD T/REEL AU 50OHM 400mDB HIROSE KOREA CO.,LTD	
6	R115 R117	Resistor,Chip	ERHZ0000517	MCR01MZP5J910 91OHM 5% 1/16W 1005 R/TP - ROHM.	
6	C101 C102 C114 C119	Capacitor Ceramic,Chip	ECCH0000187	GRM1555C1H151J 150pF 5% 50V NP0 - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	R409 R807	Resistor,Chip	ERHZ0000288	MCR01MZP5F4703 470KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	C606 VA702 VA703	Varistor	SEVY0004101	ICVN0505X150FR 5.6V 0% 360F 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	
6	C172 C175 C218 C219	Capacitor Ceramic,Chip	ECCH0000137	C1005X7R1H331KT000F 0.33nF 10% 50V X7R - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	C205	Capacitor Ceramic,Chip	ECCH0000147	MCH155CN222KK 2.2nF 10% 50V X7R - 55TO+125C 1005 R/TP - ROHM.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	R119 R414	Resistor,Chip	ERHY0003201	MCR01MZP5F1001 1KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	R126	Resistor,Chip	ERHY0000104	MCR01MZP5F49R9 49.9OHM 1% 1/16W 1005 R/TP - ROHM.	
6	C1043	Capacitor TA,Conformal	ECTH0006701	298D226X0010M2T 22uF 20% 10V 22UA - 55TO+125C 100HM 1.6X0.85X0.8MM NONE SMD R/TP 0.9T max. VISHAY INTERTECHNOLOGY ASIA PTE LTD	
6	C1042 C1052 C1079 C182	Inductor Multilayer,Chip	ELCH0004712	1005GC2T3N9SLF 3.9NH 0.3NH - 300mA 0.22OHM 4GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	L402 L403	Inductor,Wire Wound,Chip	ELCP0008017	CIG21L2R2MNE 2.2UH 20% - 500mA 0.5 0.95 0.16OHM - - SHIELD 2X1.25X1MM NONE R/TP SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	L1012	Inductor Multilayer,Chip	ELCH0003818	LQG15HS9N1J02D 9.1NH 5% - 300mA 0.26OHM 3.4GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP MURATA MANUFACTURING CO.,LTD.	
6	FL900	Filter Separator,FEM	SFAY0015501	AFEM-S102 2.1 25 0 connectivity for WCN1314 AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED	
6	R125 R127	Resistor,Chip	ERHZ0000348	MCR01MZP5F12R0 12OHM 1% 1/16W 1005 R/TP - ROHM.	
6	R905	Resistor,Chip	ERHZ0000203	MCR01MZP5F1002 10KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	R120	Resistor,Chip	ERHY0009501	MCR006YZPJ000 0OHM 5% 1/20W 0603 R/TP - ROHM.	
6	R400 R700	Resistor,Chip	ERHZ0000404	MCR01MZP5J102 1KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	C186 C188	Capacitor Ceramic,Chip	ECZH0001122	C1005X7R1H681KT000F 680pF 10% 50V X7R - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	R410	Resistor,Chip	ERHZ0000537	MCR01MZP5F6803 680KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	C703	Capacitor Ceramic,Chip	ECCH0000182	GRM155R61A104K 0.1uF 10% 10V X5R - 55TO+85C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	FL1001	Filter,Saw,Dual	EAM62492501	SAWFD1G84CB0F0A 1842.5/1960MHz 1.5*1.1*0.5 SMD R/TP 10P MURATA MANUFACTURING CO.,LTD.	
6	CN401	Connector Terminal Block	ENZY0030401	KQ03LV-3R 3,2.5 mm,STRAIGHT,Gold,Twin One board 5.4mm HIROSE KOREA CO.,LTD	
6	C125 C135	Capacitor Ceramic,Chip	ECCH0006201	C1608X5R0J475KT000N 4.7uF 10% 6.3V X5R - 55TO+85C 1608 R/TP - TDK CORPORATION	
6	FL101	Filter,Saw	SFSY0035001	B9411 2140 1.4*1.1*0.45 SMD R/TP - EPCOS PTE LTD.	
6	R418 R421 R422	Resistor,Chip	ERHZ0000204	MCR01MZP5F1003 100KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	C176	Inductor Multilayer,Chip	ELCH0004704	1005GC2T4N7SLF 4.7NH 0.3NH - 300mA 0.23OHM 3.5GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	FB705 FB706	Filter,Bead	EAM62150501	CIC10J601NC_ 600 ohm 1.6X0.8X0.8 25% 0.15 ohm 0.75A SMD R/TP 2P 0 SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	X200	Oscillator VCTCXO	EAW61543601	X1G003581002700 19.2MHZ 2PPM 2.8V 2.5x2.0x0.8MM ; SMD R/TP EPSON TOYOCOM CORP	
6	C220	Capacitor Ceramic,Chip	ECCH0010501	GRM1555C1H7R5D 7.5pF 0.5PF 50V C0G - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	R219	Resistor,Chip	ERHY0035301	RC1005F4021CS 4.02KOHM 1% 1/16W 1005 R/TP - SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C429 C462	Capacitor Ceramic,Chip	ECCH0000161	MCH153CN333KK 33nF 10% 16V X7R - 55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	C434	Capacitor TA,Conformal	EAE62287901	251M1002107MR12A168 100uF 20% 10V 50UA - 55TO+125C 0.6OHM 3.2X1.6X1.1MM NONE SMD R/TP 1.2T max. MATSUO ELECTRIC CO.,LTD	
6	L111	Inductor Multilayer,Chip	ELCH0001408	LL1005-FHL6N8J 6.8NH 5% - 300mA 0.23OHM 5.6GHZ 9 SHIELD NONE 1.0X0.5X0.5MM R/TP TOKO, INC.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	L1021	Inductor Multilayer,Chip	ELCH0004701	1005GC2T12NJLF 12NH 5% - 250mA 0.48OHM 2.1GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	U101	Module,Tx Module	EAT61673301	RF3242 0DBM 0DB 0% 0A 0A 0DB 0DBM 0DBM 22P 6.63x5.24x0.975MM WGP RS Quad Tx Dual Rx, SP6T, Dual WCDMA Port, 22pin, 6.63*5.24*0.975 RF MICRO DEVICES INC	
6	U600	IC,Acceleration Sensor	EAN62222201	BMC050 Accelerometer with Geomagnetic Sensor 3X3X1 QFN R/TP 16P Accelerometer with Geomagnetic Sensor BOSCH SENSORTec GMBH	
6	U103	IC,Power Amplifier	SMPY0021901	ACPM-5208 28 dBm,40 %,0.005 mA,-36 dBc,26.5 dB,3.0*3.0*1.1,SMD,BAND 8,CPL INT,3.0*3.0*1.1,10pin,3.2V~4.2V,28dBm,1,SMD,R/ TP,10,3.2V~4.2V,28dBm,1,SMD,R/TP,10 AVAGO TECHNOLOGIES INTERNATIONAL SALES PTE. LIMITED	
6	C1023 C1025 C144	Capacitor Ceramic,Chip	ECCH0000180	GRM1555C1H3R3C 3.3pF 0.25PF 50V NP0 - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	ZD700 ZD800	Diode,TVS	EDTY0010101	ESD9B5.0ST5G ESD9B5.0ST5G ESD9B5.0ST5G,SOD-923 ,5 V,300 mW,R/TP ,15pF SCG HONG KONG SAR LTD. SCG HONG KONG SAR LTD.	
6	ZD401	Diode,TVS	EAH61872501	PESD5V0S1UA 5V 6.2V min. 9.8V 47A 360mW SOD323 R/TP 2P 1 NXP Semiconductors	
6	J800	Card Socket	EAG63070701	5000-6P-1.3L SIM 6P STRAIGHT SMD T/REEL - HYUPJIN I&C CO.,LTD.	
6	C180 C183	Capacitor Ceramic,Chip	ECZH0000802	C1005C0G1H010CT 1pF 0.25PF 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	R113	Resistor,Chip	ERHZ0000483	MCR01MZP5J470 47OHM 5% 1/16W 1005 R/TP - ROHM.	
6	FB1	Filter,Bead	EAM62150301	CIM05J600NC 60 ohm 1.0X0.5X0.5 25% 0.2 ohm 0.65A SMD R/TP 2P 0 SAMSUNG ELECTRO- MECHANICS CO., LTD.	
6	C944	Capacitor Ceramic,Chip	ECCH00009101	C0603X5R0J104KT00NN 0.1uF 10% 6.3V X5R - 55TO+85C 0603 R/TP - TDK CORPORATION	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C171 C179	Capacitor Ceramic,Chip	ECCH0000184	GRM1555C1H2R7C 2.7pF 0.25PF 50V NP0 - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	
6	L1007	Inductor Multilayer,Chip	ELCH0004710	1005GC2T15NJLF 15NH 5% - 250mA 0.53OHM 2GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	L900	Inductor Multilayer,Chip	ELCH0001040	HK1005 3N9S-T 3.9NH 0.3NH - 300mA 0.21OHM 4GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP TAIYO YUDEN CO.,LTD	
6	R805	Resistor,Chip	ERHZ0000422	MCR01MZP5J153 15KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	ZD400	Diode,TVS	EAH61872601	PESD12VS1UA 12V 13.3V min. 19V 22.5A 360mW SOD323 R/TP 2P 1 NXP Semiconductors	
6	X400	Crystal	EXXY0026901	Q13FC1350000300 32.768KHZ 20PPM 0F NONE SMD R/TP EPSON TOYOCOM CORP	
6	C177	Inductor Multilayer,Chip	ELCH0004705	1005GC2T8N2JLF 8.2NH 5% - 250mA 0.37OHM 2.8GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	L1005	Inductor Multilayer,Chip	ELCH0004714	1005GC2T18NJLF 18NH 5% - 200mA 0.65OHM 1.6GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	FL401	Filter,EMI/Power	SFEY0016301	ICMEF112P900M COMMON MODE NOISE FILTER 0HZ 0F 0H SMD R/TP INNOCHIPS TECHNOLOGY	
6	L112 L114	Inductor Multilayer,Chip	ELCH0004706	1005GC2T10NJLF 10NH 5% - 250mA 0.42OHM 2.5GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	FL103	Filter,Saw	SFSY0033404	B9444 1575.42MHz 1.4*1.1*0.45 SMD R/TP 5P EPCOS PTE LTD.	
6	L122	Capacitor Ceramic,Chip	ECCH0000117	CL05C270JB5NNNC 27pF 5% 50V NP0 - 55TO+125C 1005 R/TP 0.5 SAMSUNG ELECTRO- MECHANICS CO., LTD.	
6	C716 C718	Capacitor Ceramic,Chip	ECZH0003126	GRM155R71A393K 39nF 10% 10V X7R - 55TO+125C 1005 R/TP - MURATA MANUFACTURING CO.,LTD.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	C932	Capacitor Ceramic,Chip	ECZH0001121	C1005X7R1H471KT000F 470pF 10% 50V X7R - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	C232 L1035	Inductor Multilayer,Chip	ELCH0004726	1005GC2T1N5SLF 1.5NH 0.3NH - 300mA 0.13OHM 7GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	R108	Resistor,Chip	ERHZ0000212	MCR01MZP5F1202 12KOHM 1% 1/16W 1005 R/TP - ROHM.	
6	VA400	Varistor	SEVY0004401	ICVL0518400V500FR 18V 0% 40pF 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	
6	U400	IC,Mini ABB	EAN62339701	LP8727- B MUIC with Charger IC CSP R/TP 25P TEXAS INSTRUMENTS KOREA LTD, HONGKONG BRANCH.	
6	D401 D700	Diode,Switching	EDSY0011901	SDB310Q 340mV 30V 200mA 1A 0SEC 150mW EMD2 R/TP 2P 1 AUK CORP	
6	CN500	Connector,BtoB	ENBY0036001	GB042-40S-H10-E3000 40P 0.4MM STRAIGHT SOCKET SMD R/TP 1M ENGINEERING PLASTIC UL94V-0 AU OVER NI LS Mtron Ltd.	
6	FL1008	Filter Duplexer,IMT	SDMY0001901	SAYFP1G95AA0B00 SAYFP1G95AA0B00 SAYFP1G95AA0B00,1950 MHz,2140 MHz,1.8 dB,2.4 dB,52 dB,43 dB,2.5*2.0*0.55 ,SMD ,Band1, 2520size, SAW, Rx unbal MURATA MANUFACTURING CO.,LTD. MURATA MANUFACTURING CO.,LTD.	
6	M700	IC,Audio Sub System	EUSY0420001	TPA2055D3 1.6~5.5V 0W WLCSP R/TP 20P - TEXAS INSTRUMENTS INCO.	
6	C934	Capacitor,Ceramic, Chip	EAE62286801	CL03A104KP3NUNC 0.0000001F 10% 10V X5R - 55TO+85C 0603 R/TP 0.3 SAMSUNG ELECTRO-MECHANICS CO., LTD.	
6	C1090 C192	Capacitor Ceramic,Chip	ECCH0000113	MCH155A180J 18pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	U900	IC,Bluetooth	EAN61966101	WCN-2243-0-58BWLNSP-S/TR-05 17VTO2.7V,2.2VTO3V,1.7VTO1.9V 120mW 58P - WLCSP R/TP-T 58P QUALCOMM INCORPORATED.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	FL2	Filter,Duplexer	EAM62511001	B8072 942.5 925 to 960 897.5 880 to 915 3.2 2.8 2.0x1.6x0.45 DUAL SMD R/TP 9P EPCOS PTE LTD.	
6	FL1002	Filter,Saw,Dual	EAM62470601	B9814 881.5/942.5MHz 1.5*1.1*0.4 SMD R/TP 10P EPCOS PTE LTD.	
6	CN400	Connector,I/O	EAG63090001	04-5161-005-100-868 7P 0.90MM ANGLE RECEPTACLE DIP R/TP Normal New IO Connector KYOCERA ELCO KOREA SALES CO.,LTD.	
5	EBR071700	PCB Assembly Main,SMT Top	EBR74703101	LGE400.ADEUSK 1.0 Main	
6	EAX010000	PCB,Main	EAX64669801	LGE400.ADEUSK 1.0 FR-4 Multi 10 - Main	
6	FB702 FB703	Filter,Bead	SFBH0008106	BLM15HG102SN1D 1000 ohm 1.0X0.5X0.5 25% 1.1 ohm 0.25A SMD R/TP 2P 0 MURATA MANUFACTURING CO.,LTD.	
6	R401 R402 R501 R502 R608 R609 R613 R614 R707 R708	Resistor,Chip	ERHY0000254	MCR01MZP5J472 4.7KOHM 5% 1/16W 1005 R/TP - ROHM.	
6	FB704	Filter,Bead	SFBH0008105	BLM15BD182SN1D 1800 ohm 1.0X0.5X0.5 25% 1.4 ohm 0.1A SMD R/TP 2P 0 MURATA MANUFACTURING CO.,LTD.	
6	R710 R711	Resistor,Chip	ERHZ0000434	MCR01MZP5J1R0 1OHM 5% 1/16W 1005 R/TP - ROHM.	
6	C606 VA702 VA703	Varistor	SEVY0004101	ICVN0505X150FR 5.6V 0% 360F 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	D400 VA501 VA502 VA503 VA504 VA700 VA701 VA806 VA807 VA808 VA809 VA810 VA811	Varistor	SEVY0004301	ICVL0518100Y500FR 18V 0% 10F 1.0*0.5*0.55 NONE SMD R/TP INNOCHIPS TECHNOLOGY	
6	C1044 C227 C910	Capacitor Ceramic,Chip	ECCH0000122	MCH155A470JK 47pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	L702	Inductor Multilayer,Chip	ELCH0004730	1005GC2T33NJLF 33NH 5% - 200mA 1OHM 1.3GHZ 8 SHIELD NONE 1.0X0.5X0.5MM R/TP PILKOR ELECTRONICS LTD.	
6	C112 C136 C194 C226 C409 C804 L120	Capacitor Ceramic,Chip	ECZH0000830	C1005C0G1H330JT000F 33pF 5% 50V NP0 - 55TO+125C 1005 R/TP - TDK KOREA COOPERATION	
6	R113	Resistor,Chip	ERHZ0000483	MCR01MZIP5J470 47OHM 5% 1/16W 1005 R/TP - ROHM.	
6	C730	Capacitor Ceramic,Chip	ECCH0000112	MCH155C150J 15pF 5% 50V NP0 -55TO+125C 1005 R/TP - ROHM Semiconductor KOREA CORPORATION	
6	U602	IC,Proximity	EUSY0376201	GP2AP002S00F GP2AP002S00F GP2AP002S00F,,8 ,R/TP , SHARP CORPORATION. SHARP CORPORATION.	
6	ZD700 ZD800	Diode,TVS	EDTY0010101	ESD9B5.0ST5G ESD9B5.0ST5G ESD9B5.0ST5G,SOD-923 ,5 V,300 mW,R/TP ,15pF SCG HONG KONG SAR LTD. SCG HONG KONG SAR LTD.	
6	LD600 LD601	LED,Chip	EDLH0015109	19-219UTD-S592/TR8 WHITE 2.7~3.1 25mA 112~285mcd x, y 95mW 1608 R/TP 2P - EVERLIGHT ELECTRONICS CO., LTD.	

13. EXPLODED VIEW & REPLACEMENT PART LIST

Level	LocationNo.	Description	PartNumber	Spec	Remark
6	VA708	Varistor	SEVY0010501	IECS0505C040FR 10V 0% 4E-12F 1.0x0.5x0.3 IEC61000-4-1 (ESD) level #4 SMD R/TP INNOCHIPS TECHNOLOGY	
5	SAD010000	Software,Mobile	SAD33303101	Base V10a - EUROPE QCT -	

13.3 Accessory

Note: This Chapter is used for reference, Part order is ordered by SBOM standard on GCSC

Level	LocationNo.	Description	PartNumber	Spec	Remark
2	EBX000000	Accessory, Data Cable	SGDY0016701	KCA-ET-8-0020 KCA-ET-8-0020 Micro USB, 1.2M KSD CO., LTD	
2	EAY060000	Adapters	SSAD0038301	100-240V, 50/60 Hz, 5.1 V, 700 mA, CE, AC-DC Adaptor, 90Vac~264Vac, 5.1V, 700mA, 5060, WALL 2P, USB,	
3	MBM062600	Card, Quick Reference	MBM63641001	PRINTING LGE400.AITABK ZZ: Without Color LG- E400 Simple Manual for ITA	
3	MBM087200	Card, Warranty	MCDF0001105	PRINTING LGP920.AITAML ZZ: Without Color Warranty card for Italy	
2	MFL053800	Manual, Operation	MFL67521001	PRINTING LGE400.AITABK ZZ: Without Color LG- E400 User Manual for ITA_Online	
2	EAC00	Rechargeable Battery, Lithium Ion	EAC61679601	BL-44JN-WWU-LGC PRISMATIC 3.7V 1.5AH 300mAh 61x44x4.4 65x44x4.8 BLACK Bar type, Top cap Screw joint 444461, 1500mAh, Bar Type (Top cap screw joint), WW, Up LG Chem, LTD.	